

VALUATION OF THE MILITARY RETIREMENT SYSTEM

SEPTEMBER 30, 2018



DoD Office of the Actuary April 2020

ACTUARIAL CERTIFICATION

This report on the valuation of the Military Retirement System as of September 30, 2018, has been prepared in accordance with generally accepted actuarial principles, standards, and practices. In preparing the report, we have relied upon information maintained by other Department of Defense activities 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 Military Retirement System experience. The annual, long-term economic assumptions include a 2.75% rate of inflation, a 3.25% across-the-board salary increase, and a 5.00% interest rate. Unless otherwise stated, normal cost percentages (NCPs) shown in this report do not reflect budgetary reductions ("sequestration").

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. Future report results may differ significantly from those presented and documented in this report for reasons that include changes in military benefits, military force structure, and the broader economic environment.

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^{*} Meets the qualification standards of the American Academy of Actuaries, and continuing professional development requirements of the Society of Actuaries, to render the actuarial opinion referenced above.

USE OF THIS REPORT

- <u>Intended Audience</u>: 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.
- *** Economic, demographic, and political forces impact the actuarial projections and valuation results and cannot be predicted precisely over long periods of time. ******
- For a high-level summary and bottom line results, refer to the *General Information* and Key Results section.
- For those new to the MRS, the main text and associated tables/figures can be found in the central section of this report (*Valuation of the MRS*).
- For those familiar with the MRS, the appendices and supplementary information provide additional technical and background information about DoD Office of the Actuary's 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.

ABBREVIATIONS AND COMMON TERMS

AEAN Aggregate Entry-Age Normal cost method

Board DoD Board of Actuaries
BRS Blended Retirement System
COLA Cost-of-Living Adjustment
CPI Consumer Price Index

CSB/Redux Career Status Bonus Retirement System combined with the Redux System

DIC Dependency and Indemnity Compensation

DoD U.S. Department of Defense

FY Fiscal Year

GORGO Actuarial Projection Model used by DoD OACT
MRF / MRS Military Retirement Fund / Military Retirement System

NCP Normal Cost Percentage

P.L. Public Law

RSFPP Retired Serviceman's Family Protection Plan

OACT DoD Office of the Actuary

OMB U.S. Office of Management and Budget

PEBD Pay Entry Base Date SBP Survivor Benefit Plan

Services Army, Navy, Air Force, Marines
SSIA Special Survivor Indemnity Allowance

UFL Unfunded Liability U.S.C. United States Code

VA U.S. Department of Veterans Affairs

GENERAL INFORMATION AND KEY RESULTS

Military Retirement System – For Fiscal Year ending September 30, 2018

1. Name of Plan:

Military Retirement System

2. Name and Address of Plan Sponsor:

Department of Defense 1400 Defense Pentagon Washington, DC 20301-1400 Phone: (703) 571-3343

Website: https://www.defense.gov/

3. Type of Plan:

Defined Benefit

4. Establishment of Funding Arrangement:

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

5. Administrative Costs:

Not borne by the Plan

6. Funding Arrangement:

Trust Fund

7. Actuarial Cost Method:

Aggregate Entry-Age Normal (AEAN)

8. Oversight:

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

Mr. James F. Verlautz, Chairman

Ms. Marcia A. Dush

Mr. John H. Moore

9. Plan Participant Information at End of Plan Year:

	<u>Members</u>	Annualized Pay
	(in 000s)	(\$ in billions)
Active Duty and Full-time Reservists:	1,383	\$59.79
Selected Drilling Reservists:	717	\$7.92
Non-Selected Reservists – w/ 20 years:	203	-N/A-
Nondisability Retirees:	1,878	\$53.40
Disability Retirees:	123	\$1.72
Surviving Families:	280	\$3.69

^{***} Only retirees and surviving families are paid from the Military Retirement Fund. ***

GENERAL INFORMATION AND KEY RESULTS (Continued) Military Retirement System – For Fiscal Year ending September 30, 2018

10. Valuation Input Data:

Extracts from files maintained by the Defense Manpower Data Center (DMDC), and files submitted by the Defense Finance and Accounting Service (DFAS)

11. 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 creditable service

12. Actuarial Assumptions:

A. Economic:

(Annual Rates)

- 1) Inflation 2.75%
- 2) Salary 3.25% (excludes promotion and longevity increases)
- 3) Interest 5.00%

B. <u>Demographic</u>:

- 1) Mortality and other assumptions: Based on Plan experience.
- 2) Mortality Improvement: Based on Plan experience using methods and assumptions utilized by the Society of Actuaries (SOA).
- 3) Percent of a Typical New Entrant Cohort Serving 20 Or More Years:

 Full-time (FT) personnel: 19% ||| Part-time (PT) personnel: 14%

13. Accounting Results *During Fiscal Year* 2018:

(\$ in billions)

A. Benefits paid to participants: \$ 58.9
B. Contributions from Services: \$ 18.4
C. Contributions from Treasury: \$ 89.7

D. Investment Income: \$ 30.5

14. Actuarial Results at End of Fiscal Year 2018:

(\$ in billions)

A. Present Value of Future Benefits: \$ 1,798.0
B. Actuarial Accrued Liability: \$ 1,533.4
C. Actuarial Value of Assets: \$ 813.9
D. Unfunded Accrued Liability: \$ 719.6
E. Funded Ratio (C./B.): 53%

15. Normal Cost Percentages Applied to Fiscal Year 2020 Basic Pay:

	DoD	Treasury	Total
Full-time:	31.0%	14.2%	45.2%
Part-time:	24.4%	3.8%	28.3%

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SUMMARY OF CHANGES FOR THE SEPTEMBER 30, 2018, VALUATION

Changes in Actuarial Assumptions

At its July 2018 meeting, the DoD Board of Actuaries approved the following changes for the September 30, 2018, valuation. For access to the official transcript of the meeting, follow this link: https://actuary.defense.gov/External-Links/.

Survivor Rates

The Board approved updates to the survivor rates. The net effect of the new rates is a -0.2% change to the full-time DoD NCP, and a -0.2% change to the part-time DoD NCP. The change led to an actuarial gain (i.e., decrease) of \$16.9 billion (or 1.1%) to the Fund. For the September 30, 2018, valuation, these assumptions are described in Appendix I.

Permanent Disability Retiree Rates

The Board approved updates to the permanent disability retiree rates. The net effect of the new rates is no change (to the 3rd decimal place) to the full- and part-time DoD NCPs, and increases the accrued liability by \$2.9 billion (or 0.2%). For the September 30, 2018, valuation, these assumptions are described in Appendix I.

Military Mortality Improvement Factors

The Board approved the use of mortality improvement factors based on military data using methods and assumptions underlying the Society of Actuaries' recent mortality improvement scales. They result in an increase to the full-time DoD NCP of +0.1%, and decrease the part-time NCP by -0.1%. The change led to an actuarial gain of \$20.0 billion (or 1.3%) to the Fund. For the September 30, 2018, valuation, mortality improvement factors are described in Appendix J.

Male/Female Adjustment Factors

The Board approved the use of new male/female adjustment factors which model the effect of expected future increases in the retiree population's percent female proportion. They result in no change (to the 3rd decimal place) to the full- or part-time DoD NCPs, and led to an actuarial loss (i.e., increase) of \$21.5 billion (or 1.4%) to the Fund. For the September 30, 2018, valuation, the male/female adjustment factors are described in Appendix J.

Blended Retirement System Opt-in Rates

The Board approved the use of updated BRS Opt-In rate assumptions based on reported data through May/June 2018. The new rates led to a +1.0% change to the full-time DoD NCP, and a +0.2% change to the part-time DoD NCPs, and led to an actuarial loss of \$8.2 billion (or 0.5%) to the Fund. For the September 30, 2018, valuation, these assumptions are described in Appendix F.

SUMMARY OF ANTICIPATED CHANGES FOR THE SEPTEMBER 30, 2019, VALUATION

Changes in Actuarial Assumptions

At its July 2019 meeting, the DoD Board of Actuaries approved the following changes for the September 30, 2019, valuation. For access to the official transcript of the meeting, follow this link: https://actuary.defense.gov/External-Links/.

Retiree Divorce Rates

The Board approved updates to the retiree divorce rates from FYs 2008-2009 to FYs 2017-2018. The net effect is no change (to the 3rd decimal place) to either the FY 2021 full- or part-time DoD NCPs, and is estimated to increase the 9/30/2018 accrued liability by \$1.1 billion (or 0.1%). For the September 30, 2018, valuation, these assumptions are described in Appendix I.

Blended Retirement System Actual Opt-In Data

The Board approved the use of actual BRS Opt-In data received from Defense Finance and Accounting Service (DFAS) over what was assumed in the 2018 valuation. The actual BRS data results in a +1.3% increase to the DoD full-time NCP, and increase the DoD part-time NCP by +0.1%, and lead to a \$4 billion (or 0.3%) estimated increase to the 9/30/2018 accrued liability. For the September 30, 2018, valuation, this data is described in Appendices C and F.

Economic Assumptions (Long-Term Interest)

The Board approved a new long-term interest rate assumption of 4.75% (vs. 5.00%). The new interest assumption increases the full-time DoD NCP by 2.5%, and increases the part-time DoD NCP by 2.3%. The change leads to an actuarial loss of \$67.4 billion (or 4.4%) to the Fund. For the September 30, 2018, valuation, this assumption is described in Appendices D and F.

Changes in Benefits

National Defense Authorization Act for FY 2020 (NDAA 2020)

The NDAA for FY 2020 contained provisions to phase out (over three years) the offsetting of SBP benefits by Dependency and Indemnity Compensation (DIC). This leads to a 0.3% increase in the full-time DoD NCP, and a 0.2% increase in the part-time. The estimated increase in the 9/30/2019 accrued liability is \$13.5 billion (or 0.9%).

It also contained a provision to include 12304(b) activations to reserve duty statuses that reduce retirement from normal retirement age of 60. It results in no change to the full-time DoD NCP and raises the part-time DoD NCP by 0.1%. There is no change to the present value of future benefits as of 9/30/2019.

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 (P.L.) 98-94 (currently Chapter 74 of Title 10, U.S.C.) established that 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 actual experience differing from assumed experience. P.L. 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.

P.L. 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. P.L. 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 (as of the July 2018, public meeting) Board members are Mr. James Verlautz (Chairman), Ms. Marcia Dush, and Mr. John Moore. 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 by the Defense Manpower Data Center (DMDC). Data on individual retirees and survivors come from official files submitted by the Defense Finance and Accounting Service (DFAS). Active data are obtained from the Active Duty Military Personnel (ADMP) Master File, and reserve data are obtained from the Reserve

Component Common Personnel Data System (RCCPDS) Master File. The DoD Office of the Actuary (OACT) reviews the data for reasonableness and consistency against figures provided by the DoD Comptroller, but does not audit the data and relies on the file suppliers for its accuracy and comprehensiveness.

Where applicable, dollar amounts include the subsequent January 1st, pay raise. These totals are summarized in Table 1.

TAI	BLE 1					
INITIAL ACCOUNTING FIG	GURES AS OF SEPTEMBE	ER 30				
<u>2018</u> <u>2017</u>						
Total Active Duty Personnel +	1 202 510	1 260 214				
Full-Time Reservists	1,382,518	1,369,314				
Total Annualized Basic Pay	\$59.79 billion	\$57.87 billion				
BRS Non-Opt-In (estimated, see Note below)	610,455	506,966				
Total Annualized Basic Pay	\$35.87 billion	\$30.32 billion				
Ž		·				
BRS Opt-In (estimated, see Note below)	772,063	862,348				
Total Annualized Basic Pay	\$23.92 billion	\$27.55 billion				
Total Selected Drilling Reservists	716,997	732,150				
Total Annualized Basic Pay	\$7.92 billion	\$7.87 billion				
Ž						
BRS Non-Opt-In (estimated, see Note below)	552,968	529,981				
Total Annualized Basic Pay	\$6.64 billion	\$6.25 billion				
BRS Opt-In (estimated, see Note below)	164,029	202,169				
Total Annualized Basic Pay	\$1.29 billion	\$1.62 billion				
•						
Total Non-Selected Reservists (with 20 years)	203,157	206,861				
Total Annualized Basic Pay	-N/A-	-N/A-				
Total Number of Nondisability Retirees	1,878,093	1,878,351				
Total Annualized Retired Pay	\$53.40 billion	\$52.12 billion				
Total / Hillanized Technod Tay	ψ33.10 σπηση	ψ32.12 σιποπ				
Total Number of Disability Retirees	123,261	118,662				
Total Annualized Retired Pay	\$1.72 billion	\$1.61 billion				
Total Number of Surviving Families	279,912	283,262				
Total Annualized Survivor Annuities	\$3.69 billion	\$3.68 billion				
Total Number of SSIA Survivors	65,460	66,703				
Total Annualized	\$243 million	\$248 million				

<u>Note</u>: Personnel and pay allocations between those expected to opt-in to the Blended Retirement System (BRS) and those not expected to opt-in, are based on assumptions, not actual data. The "BRS" figures above for 2018 include 9 months of actual data for service members who were auto-enrolled due to having been hired after the start of the Open Season (i.e., December 31, 2017).

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. Only retirees and survivors are paid from the Military Retirement Fund. There is overlap between the Surviving Families and Special Survivor Indemnity Allowance (SSIA) counts; some people are in both.

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. When projecting a large population such as the military, the law of large numbers manages certain risks.

Valuation results reflect additional minor adjustments to the projection made outside of GORGO. Further, 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. The basic pay scale is assumed to increase at the valuation across-the-board salary increase assumption. Basic pay is also increased by individual promotion and longevity increases. Generally, retired pay and survivor annuities are increased by the valuation cost-of-living adjustments (COLA) assumption each 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 a relatively small portion (less than 0.02 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. 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 DoD projected endstrengths. Detailed results of an open group projection of the Military Retirement System appear in Appendix K.

An open group projection also appears in Table 8. This projection, which shows the past and projected flow of plan assets, includes the total basic payroll over the next 25 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.

GORGO 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, and benefit tier (BRS/Non-BRS)
 - a. Officer
 - b. Enlisted
- 2. Selected reserve populations, basic pay, career points, and benefit tier (BRS/Non-BRS)
 - a. Officer
 - b. Enlisted
- 3. Non-selected reserve (those who have completed 20 good years and have not reached paid retirement) populations, basic pay, accumulated retirement credit points, and benefit tier (BRS/Non-BRS)
 - a. Officer
 - b. Enlisted
- 4. Retiree populations, benefit tier (BRS/Non-BRS), retired pay, and survivor benefit coverage
 - a. Nondisabled officer (non-CSB electors)
 - b. Nondisabled enlisted (non-CSB electors)
 - c. Nondisabled officer (CSB electors)
 - d. Nondisabled enlisted (CSB electors)
 - e. Reserve officer
 - f. Reserve enlisted
 - g. Disabled officer (Permanent and Temporary)
 - h. Disabled enlisted (Permanent and Temporary)
- 5. Surviving families in a survivor benefit plan, total annuities, survivor benefit coverage, and benefit tier (BRS/Non-BRS)
 - a. Survivor Benefit Plan (SBP)
 - b. Reserve Component Survivor Benefit Plan (RCSBP)
 - c. Retired Serviceman's Family Protection Plan (RSFPP)
 - d. Death on active duty
 - e. Minimum income
- 6. Typical new entrant cohort population and benefit tier (BRS/Non-BRS)
 - a. Officer
 - b. Enlisted

FIGURE 1

GORGO PROCESS OVERVIEW

ECONOMIC ASSUMPTIONS

- Inflation
- Interest
- Basic Pay Scale Increases

POPULATION FILES

- Active Duty
- SelectedReserve
- Non-Selected Reserve
- Retirees
- Survivors

NON-ECONOMIC ASSUMPTIONS

- Retirement
- Mortality
- Withdrawal
- Etc.



GORGO



CLOSED GROUP PROJECTION

- Actuarial Liability

OPEN GROUP PROJECTION

- Long-Term Projections

NEW ENTRANT PROJECTION

- Normal Cost Percentage 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 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. Actuarial projection model parameters
- 5. Other rates (e.g., mortality improvement)

The decrement rates and GORGO parameters are generally based on military-specific experience. The rates and descriptions of how they were derived appear in Appendices G through J. The actuarial projection model parameters, dealing with such matters as the survivor benefit elections, premium deductions, and member/beneficiary age differences, appear in Appendix F. In general, the valuation results are most sensitive to changes in the economic (e.g., long-term interest assumption) and retention assumptions, where retention refers to the active and reserve duty withdrawal/reentrant and separation rates – refer to Table 6B for analysis.

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, coupon rate, and other security-specific characteristics. The special issue "mirrored" security may have been issued recently, or at any time in the past. Under current procedures adopted by Treasury, the investment manager (DFAS Trust Funds Accounting & Reporting 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 public issue bid price with the same maturity date, coupon rate, and other security-specific characteristics. 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 investment strategy includes investing the assets so that the Fund generates sufficient cash to fund benefit payments and expenses as they come due. Many considerations are taken into account when making investment decisions, including balancing various risks, targeting an expected average maturity of future investments of 20 years (which is reasonably close to the duration of the liabilities), and current and expected economic conditions. A large majority of purchases are in Treasury Inflation-Protected Securities (TIPS). 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 interest coupon payment that has accrued since the date of the last coupon payment (generally semiannual). 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; Table 4 presents a statement of changes in the actuarial value of assets. Other associated asset statements and disclosures are included in Appendix L.

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 FY 2024 (as depicted in Table 8). 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, stationary².

When a population becomes stationary, the fund disbursements increase each year at the same rate as total pay, which in this valuation is 3.25 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 in this report's open group projection, including (1) mortality improvement, and (2) the difference between the short-term economic assumptions and the ultimate economic assumptions (see Table 8 Footnote) and the fact that payments on future (after September 30, 2018) gains and losses implied by the short-term assumptions are not projected, cause the fund disbursements to grow at an ultimate rate different than 3.25 percent per year.

More precisely, the retired population would become nearly, but not completely stationary if the open group projection were extended many years beyond what is shown in this report.

TABLE 3

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

For the Plan Year Ended September 30:

Assets	<u>2018</u>	<u>2017</u>
1) Investments, at book value:		
U.S. Government securities ¹	\$808,085	\$728,492
2) Accounts receivable:		
a) Accrued interest ²	\$5,471	\$5,141
b) Due from military retirees		
or their survivors	\$129	\$133
c) Intragovernmental	\$165	\$0
3) Cash ('Fund Balance with Treasury'):	\$25	\$329
Actuarial value of assets	<u>\$813,875</u>	<u>\$734,095</u>

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. Additional adjustment made as a result of FY 2011 National Defense Authorization Act (P.L. 111-383) regarding retired pay date as follows:

	<u>2018</u>	<u>2017</u>
Investments, at book value (actual)	\$808,085	\$724,132
October Expenditures paid in September	\$0	\$4,360
Investments, at book value (adjusted)	\$808,085	\$728,492

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 S 2018	eptember 30: <u>2017</u>
1) Actuarial value of assets at beginning of plan year:	\$734,095	\$664,363
2) Investment income:		
a) Interest/Inflation	\$35,554	\$26,335
b) Net appreciation (depreciation) in book value of investments ¹	\$(5,019)	\$(5,122)
3) Contributions:		
a) From Services	\$18,400	\$18,300
b) Appropriation to amortize the unfunded liability	\$82,877	\$81,192
c) Appropriation for Treasury Normal Cost Contrib	ution \$6,837	\$6,822
4) Total additions (2 + 3):	\$138,649	\$122,527
5) Change in Accounts Receivable	\$(4)	\$4
6) Benefits paid to participants:	<u>\$58,865</u>	\$57,799
Actuarial value of assets $(1 + 4 + 5 - 6)$:	<u>\$813,875</u>	<u>\$734,095</u>

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

	<u>2018</u>	<u>2017</u>
Amortized discount	\$271	\$227
Amortized premium	\$(5,290)	\$(5,349)
Gain (loss) on sale *	<u>\$0</u>	\$0
	\$(5,019)	\$(5,122)

^{*} 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 100 years, and then discounted back to the present (i.e. valuation date). 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, evaluated at the assumed interest rate.

There are four nondisability benefit formulas (for four distinct populations) within the Military Retirement System (see Appendix A). 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 the Career Status Bonus (CSB), which provides a bonus in exchange for reduced (Redux) benefits³. Military personnel who first become a member of a uniformed service after December 31, 2017, will be under the new Blended Retirement System (BRS) which was enacted in NDAA 2016 and took effect January 1, 2018. Members who first entered the military before January 1, 2018, and who have served for fewer than 12 years as of December 31, 2017 (or less than 4,320 points for reservists), have the option to "opt-in" to BRS via an irrevocable election during a one-year (calendar year 2018) open season or remain in the High-3 system. Members who have served 12 or more years as of December 31, 2017 (or more than 4,320 points for reservists), are not permitted to opt-in to BRS and will receive benefits based on their current plan.

P.L. 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 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 FY 2018 NCPs are summarized below (with DoD NCPs in parentheses):

Benefit Formula	Full-Time	Part-Time
Final Pay	54.8% (38.3%)	31.1% (27.0%)
High-3	50.0% (35.0%)	29.4% (25.5%)
CSB/Redux ⁴	49.3% (34.3%)	-N/A-
BRS	38.5% (25.6%)	23.5% (20.0%)

P.L. 108-136 required the U.S. Department of Treasury to pay into the Fund at the beginning of each year the normal cost arising from increased Concurrent Receipt benefits. The NCPs shown above include the respective Total ('DoD plus Treasury') and DoD percentages. Table 6A displays the DoD and Treasury NCPs separately. The NCPs are further disaggregated in Table 5.

The National Defense Authorization Act of FY 2016 (NDAA 2016, P.L. 114-92) sunsets the CSB/Redux benefit tier by not allowing any CSB elections after December 31, 2017.

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).

The FY 2019 weighted NCPs in Table 5 are calculated using the NCP weighting factors (see Appendix E), along with BRS opt-in rates (see Appendix F). The sum of the DoD and Treasury components of the weighted aggregate full-time NCP is 45.9 percent, and the weighted aggregate part-time NCP is 27.6 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 5 summarizes the components of the FY 2019 normal cost percentages. Note that the implemented NCPs in FY 2019 are the first to reflect the BRS benefit tier.

TABLE 5

NORMAL COST AS A PERCENT OF BASIC PAY (NCPs)

(DoD Normal Cost Percentage in Parentheses)

FULL-TIME	FINAL PAY	HIGH-3	CSB/REDUX	BRS	FY 2019 Weighted
Nondisability benefits Disability benefits Survivor benefits Total	50.8 (35.9)	46.3 (32.8)	45.6 (32.1)	35.2 (23.8)	42.4 (29.6)
	1.9 (0.9)	1.8 (0.8)	1.8 (0.8)	1.7 (0.8)	1.7 (0.8)
	2.1 (1.5)	1.9 (1.4)	1.9 (1.3)	1.6 (1.0)	1.8 (1.2)
	54.8 (38.3)	50.0 (35.0)	49.3 (34.3)	38.5 (25.6)	45.9 (31.6)
PART-TIME					
Nondisability benefits Disability benefits Survivor benefits Total	26.5 (23.7)	25.1 (22.5)	-N/A-	19.6 (17.3)	23.5 (20.9)
	2.1 (1.1)	1.9 (1.0)	-N/A-	1.9 (1.0)	1.9 (1.0)
	2.5 (2.2)	2.4 (2.1)	-N/A-	1.9 (1.6)	2.2 (1.9)
	31.1 (27.0)	29.4 (25.5)	-N/A-	23.5 (20.0)	27.6 (23.8)

⁻ Note that columns may not add exactly due to rounding of the separate NCP components.

As can be determined from this table, 92 percent of the full-time normal cost and 85 percent of the part-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. 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). Based on current reserve decrement rates, 14 percent of a typical group of members entering the reserves for the first time (including members with prior

The effect of reentrants on the reserve duty percentages is more pronounced relative to the above active duty figures due to the inherent nature of a reserve career (i.e., a higher proportion entering the reserves for the first time as a reentrant to the military).

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⁻ Only full-time personnel are under the CSB/Redux benefit formula, thus an analogous part-time NCP is not applicable ("N/A").

As in past valuation reports, these percentages are stated from the perspective of a new entrant cohort still in active service at 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 percent). 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, who 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.

active or non-drilling reserve time) become eligible for a reserve nondisability retirement (46% for officers, and 13% for enlisted). *** See footnote 5 for additional important details related to these percentages. ***

Table 9 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 P.L. 108-136. In recent years both the full- and part-time sums of the DoD and Treasury component weighted aggregate percentages are (generally) at the level of the CSB/Redux normal cost percentages (High-3 for part-time) since virtually all non-retired personnel entered the uniformed service on or after August 1, 1986. With the passage of BRS, projected NCPs will eventually converge to the level of the BRS NCPs. As indicated in the Table 8 footnote, the Treasury Concurrent Receipt normal cost payments reflect amounts sequestered by fiscal year.

Amortization of Unfunded Liability

Under P.L. 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.

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 this 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 FY 2044. 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 calendar year 2025 (FY 2026).

Changes in the unfunded liability can also arise because of: 1) modifications to benefit provisions, 2) changes in actuarial assumptions, and 3) 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. A 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, 2018

Table 6A summarizes the calculation of the unfunded accrued liability as of September 30, 2018. 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, 2018, and discounting these benefits back to the present (i.e. valuation date) at the assumed interest rate. The GORGO actuarial model projects benefits for the current active and retired populations over the duration of their lifetimes. Additional adjustments (generally minor) to the projection results are made outside of the GORGO model to capture the more complex law changes. The initial retirement benefits for military personnel are based on their total projected service at retirement, the applicable benefit formula, and assumed basic pay increases. Subsequent retirement benefits include assumed 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, 2018, 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, 2018. For this closed group, the relative percentages of basic pay subject to the four separate benefit formulas will change over time as fewer members are covered under the CSB/Redux, High-3 and Final Pay formulas, and more are covered under BRS. 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 will change in future years as more personnel are covered under BRS. This weighted procedure is roughly equivalent in the aggregate to projecting separately the pay of each of the eight 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 NCPs for FY 2019 are 45.9 percent full-time and 27.6 percent part-time. Federal budget deadlines require the establishment of NCPs 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 or benefits are changed, are reflected in the unfunded liability by using the implemented normal cost in the first year of the projection.

Table 6B displays selected sensitivities in the estimated valuation cost figures due to changes in key economic and non-economic assumptions. The figures require the use of actuarial assumptions regarding future economic and demographic experience, which are typically disclosed as a single value. In an attempt to assess system financial risks, key underlying valuation assumptions were tested for their respective impacts. The absolute levels of change tested in Table 6B were selected to show directional magnitudes, not necessarily anticipated changes.

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 \$719.6 billion as of September 30, 2018. This was greater than the expected unfunded liability of \$719.2 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 greater than expected means that there was a total FY 2018 loss of \$0.3 billion (\$719.6 billion minus \$719.2 billion). The components of this gain are outlined in Table 7. The total experience gain/loss is divided into five segments: (1) the loss due to the difference between the actual interest rate (3.8%) earned by the Fund in FY18 and the assumed interest rate

(5.00%); (2) the gain due to the actual January 1, 2019, COLA (2.8%) being different from that assumed (2.75%); (3) the gain due to the actual January 1, 2019, across-the-board salary (2.6%) increase being different from that assumed (3.25%); (4) the gain due to the difference between the actual and assumed non-economic experience; and (5) the loss due to the sequestration-required nonpayment of the October 1, 2018, Treasury Concurrent Receipt normal cost contribution. See the Summary of Changes for the September 30, 2018, Valuation for a more detailed discussion of the actuarial assumptions outlined in Table 7.

These changes in unfunded liability were used to calculate the October 1, 2019, unfunded liability payment. The total payment was determined to be \$91.873 billion. This total payment includes (1) a payment of \$98.057 billion to amortize the original unfunded liability, plus (2) an amount of \$6.361 billion to amortize changes in actuarial assumptions, plus (3) an amount of \$8.858 billion to amortize benefit changes, less (4) an amount of \$22.194 billion to amortize total combined experience gains and losses through FY 2018, plus (5) \$0.791 billion to amortize over one year the loss due to sequestration of the October 1, 2018, Treasury Concurrent Receipt normal cost contribution. The detailed calculations of these payment components can be found in Appendix M. Tables 10 and 11 show the projection of the unfunded liability payments and unfunded liability balances. As stated earlier, Tables 8 and 9 display all projected transactions to the Fund.

Starting in FY 2005, the total payment to be made by Treasury includes the amount required by P.L. 108-136 to pay for the increased normal cost due to Concurrent Receipt benefits in addition to the unfunded liability amortization amount. The total actuarially determined Treasury payment on October 1, 2019, is \$100.406 billion, equal to \$91.873 billion for the unfunded liability amortization plus \$9.305 billion for Concurrent Receipt benefits. Note that the difference in the actual contribution reflected a sequestration-mandated reduction to the \$9.305 billion, to \$8.533 billion. Detailed calculations of the total Treasury payment are also located in Appendix M.

TABLE 6A

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

For the Plan Year Ended September 30:

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	<u>2018</u>	<u>2017</u>
Present value of future benefits		
a. Annuitants now on roll	\$994.1	\$974.0
b. Nonretired reservists	\$201.1	\$200.3
c. Active duty personnel ¹	\$602.8	\$573.8
TOTAL	\$1,798.0	\$1,748.1
Present value of future normal cost contributions ²	\$264.6	\$246.1
Actuarial accrued liability $(12.)$	\$1,533.4	\$1,502.0
Actuarial value of assets ³	\$813.9	\$734.1
Unfunded accrued liability (3. – 4.)	\$719.6	\$767.9
Funded Ratio (4. / 3.)	53%	49%
DoD normal cost percentage (NCP) ⁴ to be		
applied to basic pay in fiscal year	FY 2020	FY 2019
a. Full-time (FT)	31.0%	30.4%
b. Part-time (PT)	24.4%	24.7%
Treasury normal cost percentage (NCP) ⁵ to be		
applied to basic pay in fiscal year	<u>FY 2020</u>	FY 2019
a. Full-time (FT)	14.2%	13.6%
b. Part-time (PT)	3.8%	3.6%
	Present value of future benefits a. Annuitants now on roll b. Nonretired reservists c. Active duty personnel 1 TOTAL Present value of future normal cost contributions Actuarial accrued liability (1. – 2.) Actuarial value of assets Unfunded accrued liability (3. – 4.) Funded Ratio (4. / 3.) DoD normal cost percentage (NCP) to be applied to basic pay in fiscal year a. Full-time (FT) b. Part-time (PT) Treasury normal cost percentage (NCP) to be applied to basic pay in fiscal year a. Full-time (FT)	Annuitants now on roll b. Nonretired reservists c. Active duty personnel TOTAL Present value of future normal cost contributions Present value of future normal cost contributions Section 1,798.0 Present value of future normal cost contributions Actuarial accrued liability (1. – 2.) Actuarial value of assets Section 1,533.4 Actuarial value of assets Section 1,533.4 Actuarial value of assets Section 2,533.4 Actuarial value of assets Section 3,719.6 Funded Ratio (4. / 3.) DoD normal cost percentage (NCP) Total 1,533.4 Total 1,533.4 Actuarial value of assets Section 3,719.6 Funded Ratio (4. / 3.) Total 1,533.4 Actuarial value of assets Section 3,719.6 Funded Ratio (4. / 3.) Treasury normal cost percentage (NCP) Treasury normal cost percentage (NCP)

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.

The September 30, 2018, Present Value of Future Normal Cost (PVFNC) contributions reflects a reduction of \$753.681 million due to sequestration of the October 1, 2018, Treasury Concurrent Receipt normal cost contribution. The September 30, 2017, PVFNC reflects a reduction of \$667.945 million due to sequestration of the October 1, 2017, Treasury Concurrent Receipt normal cost contribution.

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

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.

⁵ P.L. 108-136 requires the Department of Treasury to pay the normal cost resulting from the increase in benefits due to Concurrent Receipt.

TABLE 6B

MILITARY RETIREMENT SYSTEM SENSITIVITY TESTS* (\$ in billions)

Long-Term Interest Assumption

[Baseline Interest = 5.00%]

		<u>Baseline</u>	1% LOWER	<u>1% HIGHER</u>
1.	Present value of future benefits	\$ 1,798.0	\$ 2,210.6	\$ 1,497.2
2.	Actuarial accrued liability	\$ 1,533.4	\$ 1,818.9	\$ 1,309.1
3.	Actuarial value of assets	\$ 813.9	\$ 813.9	\$ 813.9
4.	Unfunded accrued liability $(23.)$	\$ 719.6	\$ 1,005.0	\$ 495.2
5.	Funded Ratio	53%	45%	62%
6.a.	FY 2020 FT NCP [DoD + Treasury]	45.2%	63.1%	33.2%
6.b.	FY 2020 PT NCP [DoD + Treasury]	28.3%	46.0%	19.8%

Retention Assumptions

[FT Baseline Retention = 'Withdrawal' rates, Appendix G]
[PT Baseline Retention = 'Separation' rates, Appendix H]

		Baseline	25% LOWER	25% HIGHER
1.	Present value of future benefits	\$ 1,798.0	\$ 1,876.4	\$ 1,723.7
2.	Actuarial accrued liability	\$ 1,533.4	\$ 1,539.6	\$ 1,528.0
3.	Actuarial value of assets	\$ 813.9	\$ 813.9	\$ 813.9
4.	Unfunded accrued liability $(2 3.)$	\$ 719.6	\$ 725.7	\$ 714.1
5.	Funded Ratio	53%	53%	53%
6.a.	FY 2020 FT NCP [DoD + Treasury]	45.2%	51.5%	37.3%
6.b.	FY 2020 PT NCP [DoD + Treasury]	28.3%	35.3%	20.2%
7.a.	New Entrants eligible for FT retirement (%)	19%	27%	12%
7.b.	New Entrants eligible for PT retirement (%)	14%	27%	6%

^{*} A sensitivity test is a process for assessing the impact of a change in an actuarial assumption on an actuarial measurement. As mentioned earlier in the *Valuation Data and Procedures* section of this report, the valuation results/measurements are most sensitive to changes in the economic (e.g., long-term interest) assumptions and retention assumptions. 'Baseline' figures are generally from Table 6A and other sections of this report. The absolute levels of the changes (+/- 1% and +/- 25%, respectively) were selected to show potential directional magnitudes, not necessarily anticipated changes, assisting the report user to analyze system risks.

TABLE 7

MILITARY RETIREMENT SYSTEM FY 2018 CHANGE IN UNFUNDED LIABILITY (\$ in billions)

For the Plan Year Ended September 30, 2018

			_	
1.	Act	rual unfunded accrued liability (9/30/18)	\$719.6	
2.	Exp	pected unfunded accrued liability (9/30/18)	\$719.2	
3.	Tot	al (gain)/loss	\$0.3	0.0%
	a.	Total experience (gain)/loss	\$4.7	0.3%
		Interest assumption	\$9.5	1.2%
		COLA assumption	\$0.5	0.0%
		Salary assumption	(\$3.0)	0.2%
		Non-economic experience	(\$3.1)	0.2%
		10/1/18 unpaid contribution	\$0.8	0.0%
	b.	Total benefit change (gain)/loss	\$0.0	0.0%
	c.	Total assumption change (gain)/loss	(\$4.4)	0.3%
		New BRS Opt-In Rates	\$8.2	0.5%
		Updated Survivor Rates	(\$16.9)	1.1%
		Updated Permanent Disability Retiree Rates	\$2.9	0.2%
		New Military Mortality Improvement Factors	(\$20.0)	1.3%
		New Male/Female Adjustment Factors	\$21.5	1.4%

In this table, negative values represent actuarial gains and positive values represent actuarial losses.

Percentages shown are ratios of absolute values of each gain or loss component to the accrued liability (Table 6A, line 3), except the percentage for the experience (gain)/loss due to the interest assumption is the ratio to the actuarial value of assets (Table 6A, line 4).

The reasons for the experience (gain)/loss for: interest = 5.00% long-term assumed vs 3.8% FY18 fund yield; salary = 3.25% long-term assumed vs 2.6% Jan 2019 increase; COLA = 2.75% long-term assumed vs. 2.8% Jan 2019 COLA. The 10/1/18 unpaid contribution loss is due to sequestration of the Treasury Concurrent Receipt normal cost contribution.

TABLE 8

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

				Contribution	ons Received								
	Basic	From DoD	, for Normal	From Tr	easury, for		reasury, for					Fund Bal	ance, End of
Fiscal Year	Payroll ²	Co	ests 3	Norma	l Costs 3	Unfunde	d Liability ⁴	Investme	ent Income	Fund Dish	oursements 5	Y	ear 6
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	27.1	12.2	(22.0)			11.5	(21.0)	10.9	(29.4)	27.0	(74.0)	121.0	(252.1)
1993	37.1 36.7	11.2	(32.9) (30.5)			10.7	(31.0) (29.2)	11.3	(30.8)	27.8 28.8	(74.9) (78.5)	131.0 135.3	(353.1) (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 2002	40.9	11.4 12.9	(27.9)			16.1	(39.4)	13.2	(32.3)	34.1	(83.4)	169.2	(413.7)
2002	44.7 52.0	13.7	(28.9) (26.3)			17.0 17.9	(38.0) (34.4)	12.4 10.0	(27.7) (19.2)	35.1 35.6	(78.5) (68.5)	176.5 182.6	(394.9) (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 2009	59.2 63.0	16.1 17.5	(27.2)	2.8 3.7	(4.7)	46.2 51.1	(78.0)	15.6 2.9	(26.4)	45.8 50.0	(77.4)	253.1	(427.5)
2009	03.0	17.3	(27.8)	3.7	(5.9)	31.1	(81.1)	2.9	(4.6)	30.0	(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)
2011	66.9	21.0	(31.4)	5.0	(7.5)	61.4	(91.8)	18.0	(26.9)	51.0	(76.2)	376.1	(562.2)
2012	66.5	21.9	(32.9)	5.4	(8.1)	64.8	(97.4)	12.5	(18.8)	52.6	(79.1)	428.0	(643.6)
2013	66.3	20.5	(30.9)	6.8	(10.3)	67.7	(102.1)	15.0	(22.6)	54.5	(82.2)	483.5	(729.3)
2014	65.4	20.5	(31.3)	6.3	(9.6)	72.9	(111.5)	17.1	(26.1)	55.4	(84.7)	545.0	(833.3)
2015	64.3	19.7	(30.6)	6.2	(9.6)	75.6	(117.6)	10.8	(16.8)	56.7	(88.2)	600.6	(934.1)
2016	64.6	19.5	(30.2)	6.9	(10.7)	79.3	(122.8)	15.3	(23.7)	57.2	(88.5)	664.4	(1,028.5)
2017	65.4	18.3	(28.0)	6.8	(10.4)	81.2	(124.1)	21.2	(32.4)	57.8	(88.4)	734.1	(1,122.5)
2018	66.7	18.4	(27.6)	6.8	(10.3)	82.9	(124.3)	30.5	(45.8)	58.9	(88.4)	813.9	(1,220.2)
						↑ ACT	UAL T						
					1	PROJ	E C T E D	Ţ					
2019	\$70.8	\$21.0	(29.6%)	\$7.9	(11.2%)	\$88.0	(124.4%)	\$44.5	(62.9%)	\$60.7	(85.8%)	\$914.5	(1,292.5%)
2020	72.4	21.9	(30.2)	8.5	(11.7)	91.9	(126.9)	49.7	(68.7)	62.3	(86.0)	1,024.2	(1,414.1)
2021	73.3	21.9	(29.9)	9.5	(12.9)	94.9	(129.3)	55.4	(75.5)	64.0	(87.3)	1,141.8	(1,557.0)
2022 2023	76.3 79.3	22.6	(29.6)	9.8 10.1	(12.8)	97.1 100.3	(127.3)	61.4	(80.4)	65.8	(86.3)	1,266.8 1,400.3	(1,660.3)
2023	79.3	23.2	(29.3)	10.1	(12.8)	100.5	(126.5)	67.7	(85.5)	67.7	(85.4)	1,400.3	(1,766.4)
2024	82.3	23.8	(29.0)	10.4	(12.7)	103.5	(125.8)	74.6	(90.6)	70.0	(85.0)	1,542.7	(1,874.5)
2025	85.4	24.5	(28.7)	10.8	(12.6)	106.9	(125.2)	81.8	(95.8)	72.2	(84.5)	1,694.5	(1,984.4)
2026	88.6	25.2	(28.4)	11.1	(12.6)	110.4	(124.6)	89.6	(101.1)	74.3	(83.8)	1,856.5	(2,096.2)
2027	91.8	25.8	(28.1)	11.5	(12.5)	-8.7	(-9.5)	91.7	(99.8)	76.4	(83.2)	1,900.4	(2,069.0)
2028	95.3	26.5	(27.9)	11.8	(12.4)	-9.0	(-9.5)	93.9	(98.5)	78.8	(82.7)	1,944.9	(2,041.4)
2029	98.4	27.2	(27.6)	12.2	(12.4)	-9.3	(-9.5)	96.0	(97.6)	81.3	(82.7)	1,989.6	(2,021.9)
2030	101.6	27.2	(27.3)	12.5	(12.3)	-9.6	(-9.4)	98.2	(96.6)	84.0	(82.6)	2,034.6	(2,021.7)
2031	105.0	28.4	(27.1)	12.9	(12.3)	-9.9	(-9.4)	100.4	(95.7)	86.6	(82.5)	2,079.7	(1,981.0)
2032	108.4	29.1	(26.8)	13.2	(12.2)	-2.8	(-2.6)	103.0	(95.0)	89.4	(82.5)	2,132.8	(1,967.0)
2033	111.9	29.8	(26.6)	13.6	(12.1)	23.1	(20.6)	106.9	(95.5)	92.4	(82.6)	2,213.7	(1,977.8)
2034 2035	115.5	30.4	(26.4)	14.0	(12.1)	23.8	(20.6)	111.0	(96.1)	95.4 98.2	(82.6)	2,297.5	(1,989.1)
2033	119.2 123.1	31.2 32.0	(26.1) (25.9)	14.4 14.8	(12.0) (12.0)	24.6 14.7	(20.6) (11.9)	115.1 119.0	(96.6) (96.6)	100.9	(82.3) (81.9)	2,384.6 2,464.1	(1,999.9) (2,000.9)
2037	127.2	32.8	(25.8)	15.2	(12.0)	11.0	(8.6)	122.7	(96.5)	103.7	(81.5)	2,542.1	(1,998.3)
2038	131.4	33.7	(25.6)	15.7	(11.9)	11.3	(8.6)	126.6	(96.4)	106.4	(81.0)	2,623.0	(1,995.9)
2039	135.7	34.6	(25.5)	16.2	(11.9)	11.7	(8.6)	130.7	(96.3)	109.3	(80.6)	2,706.8	(1,994.5)
2040	140.1	35.5	(25.4)	16.6	(11.9)	12.1	(8.6)	134.9	(96.3)	112.2	(80.1)	2,793.6	(1,994.6)
2041 2042	144.6 149.2	36.5 37.6	(25.3) (25.2)	17.1 17.7	(11.9) (11.8)	12.5 12.9	(8.6) (8.6)	139.2 143.7	(96.3) (96.3)	115.2 118.1	(79.7) (79.1)	2,883.8 2,977.5	(1,995.0) (1,995.4)
2042	154.0	38.7	(25.1)	18.2	(11.8)	13.3	(8.6)	143.7	(96.3)	121.1	(78.6)	3,075.0	(1,995.4)
			(· · · · ·)		,		(- ")		()		()	.,	(/)
2044	159.0	39.8	(25.1)	18.8	(11.8)	13.7	(8.6)	153.3	(96.4)	124.1	(78.1)	3,176.5	(1,998.3)
2045	164.1	41.1	(25.0)	19.4	(11.8)	14.2	(8.6)	158.4	(96.5)	127.1	(77.5)	3,282.3	(2,000.5)
2046	169.4	42.3	(25.0)	20.0	(11.8)	14.6	(8.6)	163.7	(96.6)	130.2	(76.8)	3,392.8	(2,003.0)

Note: Treasury Normal Cost Contributions are net of actual and expected sequestered amounts by the following fiscal years (discussed further in Appendix M):

- FY 2014: 9.8%
- FY 2015: 9.5%
- FY 2016: 9.3%
- FY 2017: 9.1%
- FY 2018: 8.9%
- FY 2019: 8.7%
- FY 2020: 8.6%

TABLE 8 FOOTNOTES

NOTE REGARDING OPEN GROUP PROJECTIONS: The 25-year open group projection in this report is based on benefit provisions, data, methods and assumptions described herein. The values are displayed in future-year dollars. They are intended to provide the user with a general directional magnitude; uncertainty increases with the length of the projection period. Actual results are heavily dependent on the underlying assumptions being realized. Benefit changes, economic conditions, and other factors are not perfectly predictable. **Economic, demographic, and political forces cannot be precisely predicted over very long periods of time**.

In addition, the fundamental purpose of OACT'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, many 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 short-term economic assumptions for basic pay and COLA increases).

The projection in this publication is intentionally limited to 25 years. Additional projection years, as well as projections assuming different economic assumptions, may be available upon request.

- P.L. 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. P.L. 108-136 assigned Treasury the responsibility of funding the normal cost resulting from increased benefits due to Concurrent Receipt, starting in FY 2005. There are no employee contributions to the Fund.
- DoD-projected endstrengths are used through the end of FY 2024 and constant force strengths are used thereafter. Basic pay is only a portion of military compensation. See The Military Retirement System: Benefits in Appendix A for details. FYs 2014, 2015, 2016, 2017, 2018, 2019, and 2020 Treasury Normal Cost Payments reflect sequestered amounts of 9.8% in FY 2014, 9.5% in FY 2015, 9.3% in FY 2016, 9.1% in FY 2017, 8.9% in FY 2018, 8.7% in FY 2019, and 8.6% in FY 2020 (discussed further in Appendix M).
- 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 FY 1987, NCPs have been developed separately for the full-time and part-time basic payrolls. Beginning in FY 2008, the part-time NCP has been charged against mobilized reserve pay. However, this report includes mobilized reserve pay as part of the full-time payroll from FY 2008 through FY 2010.

TABLE 8 FOOTNOTES (Continued)

- Reflects amortization payments for FY 2020 and thereafter determined in the September 30, 2018, valuation. The FY 2027 FY 2032 payments depict negative values, implying the Fund will have to pay Treasury this amount. There is no mechanism allowing this case to occur under current law. OACT (and the Board) are monitoring this situation.
- 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, FY 1985 disbursements include only 11 months of payments. The FY 2011 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 in order to give the projection a smooth trajectory.
- ⁶ This fund balance (on a book value basis) reflects cash disbursements during the year. On September 30, 2018, assets in the Fund totaled \$813.9 billion.

<u>OTHER NOTES</u>: Mortality rates that are applied in the valuation to active/reserve duty members, retirees, and survivors, are subject to annual rates of improvement – see Appendix J. People and pay underlying the projection can be found in Appendix K. The table does not reflect future gains or losses due to short-term economic experience being different than assumed. Consequently, only payments on the total unfunded liability as of September 30, 2018, are reflected.

ANNU	AL ECONOMIC	C ASSUMPTIONS USE	D IN PROJECTION	IS OF PLAN ASSETS
	Fiscal Year	Full COLA	Basic Pay	<u>Interest</u>
[Actual]	2019	2.8%	2.6%	5.0%
	2020	1.8	3.1	5.0
	2021	2.3	3.7	5.0
	2022	2.3	3.7	5.0
	2023	2.3	3.7	5.0
	2024	2.3	3.7	5.0
	2025	2.3	3.7	5.0
	2026	2.3	3.7	5.0
	2027	2.3	3.7	5.0
	2028	2.75	3.7	5.0
[Long-Tern	<i>i</i>] 2029+	2.75	3.25	5.0

Full COLA is equal to full cost-of-living increases to retiree and survivor annuities. Basic Pay is the rate at which the entire military pay table increases (hence excludes longevity or 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 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 2.75% COLA, 3.25% basic pay, and 5.0% interest.

TABLE 9

MILITARY RETIREMENT SYSTEM

PAST AND PROJECTED PAYROLL AND NORMAL COST PAYMENTS

(In Billions of Dollars and as a Proportion of Payroll)

Fiscal		Payroll			DoD Normal	Cost Paymen	ıts	Ti	reasury Norma	al Cost Payme	ents	Normal Co	ost Payments
Year	Full-Time	_	Total	Full	-Time		t-Time	Full	-Time	Part	-Time		otal
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 1999	33.4 33.7	3.7 3.9	37.1 37.6	10.2 10.2	(30.5) (30.2)	0.3 0.3	(8.8) (8.7)	0.0		0.0		10.5 10.5	(28.3) (28.0)
1999	33.7	3.9	37.0	10.2	(30.2)	0.5	(6.7)	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 2002	36.7 40.8	4.2 3.9	40.9 44.7	10.9 12.4	(29.6)	0.6 0.6	(14.1)	0.0		0.0		11.5 12.9	(28.0)
2002	47.8	4.2	52.0	13.1	(30.3) (27.4)	0.6	(14.4) (14.6)	0.0		0.0		13.7	(28.9)
2003	49.4	4.2	53.6	13.1	(27.4)	0.0	(16.0)	0.0		0.0		14.1	(26.4) (26.2)
2004	77.7	7.2	33.0	13.4	(27.1)	0.7	(10.0)	0.0		0.0		14.1	(20.2)
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)
2011	56.6	10.3	66.9	18.5	(32.7)	2.5	(24.4)	4.6	(8.2)	0.3	(3.2)	26.0	(38.9)
2012	57.3	9.2	66.5	19.7	(34.3)	2.2	(24.3)	5.0	(8.8)	0.3	(3.6)	27.3	(41.0)
2013	57.1	9.2	66.3	18.3	(32.1)	2.2	(24.4)	6.4	(11.2)	0.3	(3.2)	27.3	(41.1)
2014	57.0	8.4	65.4	18.5	(32.4)	2.1	(24.5)	6.0	(11.7)	0.2	(2.9)	26.8	(40.9)
2015	56.0	8.3	64.3	18.0	(32.2)	1.9	(22.5)	6.0	(11.8)	0.2	(2.7)	26.1	(40.6)
2016	56.3	8.3	64.6	17.7	(31.4)	1.9	(23.0)	6.7	(13.1)	0.2	(2.9)	26.5	(41.0)
2017	56.4	9.0	65.4	16.3	(28.9)	2.0	(22.8)	6.6	(12.8)	0.3	(3.3)	25.2	(38.5)
2018	57.5	9.2	66.7	16.3	(28.4)	2.1	(22.6)	6.5	(12.5)	0.3	(3.3)	25.2	(37.8)
						-	UAL T						
2019	661.2	\$9.6	\$70.8	\$18.6	(30.4%)	P R O J	E C T E D (24.7%)		(13.6%)	60.2	(2.69/)	#20 0	(40.8%)
2019	\$61.2 63.1	9.3	72.4	19.6	(31.0)	2.3	(24.7%)	\$7.6 8.2	(14.2)	\$0.3 0.3	(3.6%) (3.8)	\$28.8 30.4	(41.9)
2020	64.7	8.6	73.3	19.0	(30.7)	2.3	(24.4)	9.1	(14.1)	0.3	(3.8)	31.4	(42.8)
2022	67.4	8.9	76.3	20.4	(30.7)	2.1	(24.0)	9.4	(14.1)	0.3	(3.8)	32.3	(42.4)
2023	70.0	9.3	79.3	21.0	(30.0)	2.2	(23.8)	9.8	(13.9)	0.4	(3.8)	33.3	(42.0)
2024	72.6	9.7	82.3	21.6	(29.7)	2.3	(23.6)	10.1	(13.9)	0.4	(3.8)	34.3	(41.7)
2025	75.4	10.0	85.4	22.1	(29.4)	2.4	(23.4)	10.4	(13.8)	0.4	(3.8)	35.3	(41.3)
2026	78.1	10.4	88.6	22.7	(29.1)	2.4	(23.3)	10.7	(13.7)	0.4	(3.8)	36.3	(41.0)
2027	81.0	10.9	91.8	23.3	(28.8)	2.5	(23.1)	11.1	(13.7)	0.4	(3.7)	37.3	(40.6)
2028	84.0	11.3	95.3	24.0	(28.5)	2.6	(22.9)	11.4	(13.6)	0.4	(3.7)	38.4	(40.3)
2029	86.7	11.7	98.4	24.5	(28.3)	2.7	(22.8)	11.7	(13.5)	0.4	(3.7)	39.3	(40.0)
2030	89.5	12.1	101.6	25.1	(28.0)	2.7	(22.6)	12.1	(13.5)	0.4	(3.7)	40.3	(39.7)
2031	92.4	12.6	105.0	25.6	(27.7)	2.8	(22.5)	12.4	(13.4)	0.5	(3.7)	41.3	(39.3)
2032	95.4	13.0	108.4	26.2	(27.4)	2.9	(22.3)	12.8	(13.4)	0.5	(3.7)	42.3	(39.0)
2033	98.5	13.5	111.9	26.8	(27.2)	3.0	(22.2)	13.1	(13.3)	0.5	(3.7)	43.4	(38.7)
2034	101.6	13.9	115.5	27.4	(27.0)	3.1	(22.0)	13.5	(13.3)	0.5	(3.7)	44.4	(38.5)
2035	104.8	14.4	119.2	28.0	(26.7)	3.2	(21.9)	13.8	(13.2)	0.5	(3.7)	45.5	(38.2)
2036	108.2	14.9	123.1	28.7	(26.5)	3.2	(21.7)	14.2	(13.2)	0.5	(3.7)	46.7	(38.0)
2037	111.8	15.4	127.2	29.5	(26.3)	3.3	(21.6)	14.7	(13.1)	0.6	(3.6)	48.0	(37.7)
2038	115.5	16.0	131.4	30.2	(26.2)	3.4	(21.4)	15.1	(13.1)	0.6	(3.6)	49.3	(37.5)
2039	119.2	16.5	135.7	31.1	(26.1)	3.5	(21.2)	15.6	(13.1)	0.6	(3.6)	50.7	(37.4)
2040	123.0	17.1	140.1	31.9	(26.0)	3.6	(21.1)	16.0	(13.0)	0.6	(3.6)	52.2	(37.2)
2041	126.9	17.7	144.6	32.8	(25.9)	3.7	(20.9)	16.5	(13.0)	0.6	(3.6)	53.7	(37.1)
2042	131.0	18.3	149.2	33.8	(25.8)	3.8	(20.8)	17.0	(13.0)	0.7	(3.6)	55.3	(37.0)
2043	135.1	18.9	154.0	34.8	(25.7)	3.9	(20.7)	17.5	(13.0)	0.7	(3.6)	56.9	(36.9)
2044	139.5	19.5	159.0	35.8	(25.7)	4.0	(20.5)	18.1	(13.0)	0.7	(3.6)	58.6	(36.9)
2045	143.9	20.2	164.1	36.9	(25.7)	4.1	(20.4)	18.7	(13.0)	0.7	(3.6)	60.4	(36.8)
2046	148.6	20.8	169.4	38.1	(25.6)	4.2	(20.4)	19.3	(13.0)	0.7	(3.6)	62.3	(36.8)
													-

 $\underline{\underline{Note}}{:} \quad \text{Treasury Normal Cost Contributions are net of actual and expected sequestered amounts as discussed in Appendix M.}$

TABLE 10

MILITARY RETIREMENT SYSTEM

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

Year	Original	Assumption	Benefit	Actuarial	
	UFL	Changes	Changes	Experience	Total
1984	\$9.500	\$.000	\$.000	\$.000	\$9.500
1985	\$10.500	0.000	0.000	0.000	10.500
	\$11.042	0.000	0.000	-0.518	10.524
1986					
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	-0.171	-6.897	11.908
1775	Ψ23.003	4.000	0.100	0.057	11.500
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
1000	620 102	0.201	0.052	14.722	15 202
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	10 167	21.358
2004				-19.167	
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	0.386	7.930	-19.181	67.733
2013	\$81.373	3.150	8.211	-19.849	72.885
2014	\$84.221	2.594	8.498	-19.751	75.562
2015	\$87.169	3.770	8.796	-20.446	79.289
2016	\$90.024	4.459	7.724	-21.015	81.192
2017	\$92.950	3.736	7.904	-21.713	82.877
2017	\$92.930 \$94.971	6.383	8.214	-21.713	87.996
	** **	↑ A C T			
		· · · · · · · · · · · · · · · · · · ·	СТЕВ ↓		
2019	\$98.057	\$6.361	\$8.858	-\$21.403	\$91.873
2020	101.244	6.568	9.146	-22.105	94.853
2021	104.535	6.782	9.443	-23.660	97.100
2022	107.932	7.002	9.750	-24.429	100.255
2023	111.440	7.229	10.067	-25.223	103.513
2024	115.062	7.464	10.394	-26.043	106.877
	118.802	7.707	10.732	-26.890	110.351
2025	0.000	7.958	11.080	-27.763	-8.725
2025		8.216	11.441	-28.666	-9.009
2026			11.441		-9.009
2026 2027	0.000				
2026		8.483	11.812	-29.597	-9.302
2026 2027	0.000				
2026 2027 2028	0.000 0.000	8.483	11.812	-29.597	-9.302
2026 2027 2028 2029	0.000 0.000 0.000	8.483 8.759	11.812 12.196	-29.597 -30.559	-9.302 -9.604
2026 2027 2028 2029 2030 2031	0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337	11.812 12.196 12.593 13.002	-29.597 -30.559 -31.553 -25.155	-9.302 -9.604 -9.917 -2.816
2026 2027 2028 2029 2030	0.000 0.000 0.000 0.000	8.483 8.759 9.043	11.812 12.196 12.593	-29.597 -30.559 -31.553	-9.302 -9.604 -9.917
2026 2027 2028 2029 2030 2031 2032 2033	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954	11.812 12.196 12.593 13.002 13.424 13.861	-29.597 -30.559 -31.553 -25.155 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815
2026 2027 2028 2029 2030 2031 2032 2033	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954	11.812 12.196 12.593 13.002 13.424 13.861 14.311	-29.597 -30.559 -31.553 -25.155 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815
2026 2027 2028 2029 2030 2031 2032 2033	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042	-29.597 -30.559 -31.553 -25.155 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815
2026 2027 2028 2029 2030 2031 2032 2033 2034	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954	11.812 12.196 12.593 13.002 13.424 13.861 14.311	-29.597 -30.559 -31.553 -25.155 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036	0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654
2026 2027 2028 2029 2030 2031 2032 2033 2034 2034	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680 12.060	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680 12.060 12.452	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680 12.060 12.452
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680 12.060	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680 12.060 12.452 12.857
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680 12.060 12.452	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680 12.060 12.452
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680 12.060 12.452 12.857	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680 12.060 12.452 12.857
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680 12.060 12.452 12.857 13.274 13.706	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680 12.060 12.452 12.857 13.274 13.706
2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	8.483 8.759 9.043 9.337 9.641 9.954 10.278 10.612 10.957 11.313 11.680 12.060 12.452 12.857 13.274	11.812 12.196 12.593 13.002 13.424 13.861 14.311 4.042 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-29.597 -30.559 -31.553 -25.155 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	-9.302 -9.604 -9.917 -2.816 23.065 23.815 24.589 14.654 10.957 11.313 11.680 12.060 12.452 12.857 13.274

 $\underline{Note}{:} \quad Actuarial \ Experience \ includes \ impact \ of \ sequestered \ Treasury \ Normal \ Cost \ payments.$

TABLE 11 MILITARY RETIREMENT SYSTEM PAST AND PROJECTED UNFUNDED LIABILITY BALANCE ON SEPTEMBER 30 (Before Payment) (\$ in billions)

Calendar	Original	Assumption	Benefit	Actuarial	
Year	UFL	Changes	Changes	Experience	Total
1984	\$528.700	\$.000	\$.000	\$.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
1,000	032.700	50.002	3.070	011100	1,70,302
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 -217.255	491.409
1995	852.872	-134.017	-0.832		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
	1,016.346	2.415	143.487	-245.726 -258.786	908.548
2010					
2011	997.569	8.208	143.947	-252.478	897.246
2012	974.816	68.621	144.141	-254.041	933.537
2013	945.510	58.240	143.703	-262.357	885.095
2014	911.665	81.894	142.944	-268.738	867.765
	872.953	96.068	127.811	-280.383	816.450
2015					
2016	827.038	80.674	124.563	-289.710	742.564
2017	775.707	140.441	131.072	-279.349	767.871
2018	716.895	139.147	129.327	-265.801	719.567
		↑ A C T	UAL ↑		
		↓ PROJE	C T E D ↓		
2019	\$653.020	\$139.402	\$127.168	-\$255.668	\$663.922
2020	582.711	139.693	124.226	-245.979	600.652
2021	505.540	139.781	120.834	-235.067	531.088
2022			116.960		
	421.056				155 699
2023	421.056 328.780	139.649 139.280		-221.978 -207.426	455.688 373.205
2023	421.056 328.780	139.649 139.280	112.571	-221.978 -207.426	455.688 373.205
2024	328.780 228.207	139.280 138.653	112.571 107.629	-207.426 -191.313	373.205 283.176
2024 2025	328.780 228.207 118.802	139.280	112.571 107.629 102.097	-207.426 -191.313 -173.534	373.205 283.176 185.114
2024	328.780 228.207	139.280 138.653	112.571 107.629	-207.426 -191.313	373.205 283.176
2024 2025 2026	328.780 228.207 118.802 0.000	139.280 138.653 137.749 136.544	112.571 107.629 102.097 95.933	-207.426 -191.313 -173.534 -153.976	373.205 283.176 185.114 78.501
2024 2025	328.780 228.207 118.802	139.280 138.653 137.749	112.571 107.629 102.097	-207.426 -191.313 -173.534	373.205 283.176 185.114
2024 2025 2026 2027 2028	328.780 228.207 118.802 0.000 0.000 0.000	139.280 138.653 137.749 136.544 135.015 133.139	112.571 107.629 102.097 95.933 89.096 81.537	-207.426 -191.313 -173.534 -153.976 -132.524 -109.050	373.205 283.176 185.114 78.501 91.587 105.626
2024 2025 2026 2027 2028	328.780 228.207 118.802 0.000 0.000 0.000	139.280 138.653 137.749 136.544 135.015 133.139	112.571 107.629 102.097 95.933 89.096 81.537	-207.426 -191.313 -173.534 -153.976 -132.524 -109.050 -83.426	373.205 283.176 185.114 78.501 91.587 105.626
2024 2025 2026 2027 2028 2029 2030	328.780 228.207 118.802 0.000 0.000 0.000 0.000 0.000	139.280 138.653 137.749 136.544 135.015 133.139 130.889 128.236	112.571 107.629 102.097 95.933 89.096 81.537 73.212 64.067	-207.426 -191.313 -173.534 -153.976 -132.524 -109.050 -83.426 -55.510	373.205 283.176 185.114 78.501 91.587 105.626 120.675 136.793
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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 nonrevolving 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.

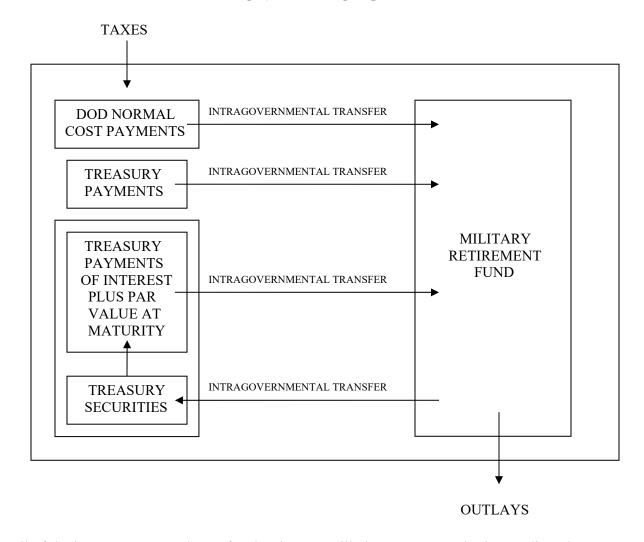
The Fund has two types of payouts: (1) payments to retirees and survivors of retirees and (2) purchases of U.S. Treasury securities. The purchase of a Treasury security is also an intragovernmental transfer, while a payment to a retiree or a survivor is not.

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 \$80 billion in securities (debit) and the Treasury sells \$80 billion in securities (credit), the net direct federal budget deficit effect is zero.
- If the Treasury pays \$30 billion interest (debit) and the Fund earns \$30 billion interest (credit), the net direct federal budget deficit effect is zero.
- Disregarding all other government programs, if the government collects \$55 billion in tax revenues (credit) and pays \$60 billion to retirees (debit), the net direct federal budget deficit effect is \$5 billion.

FIGURE 2

MILITARY RETIREMENT SYSTEM UNIFIED BUDGET



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 2018 the amount needed to pay retirees was \$60 billion and the Military Retirement Fund had grown to \$815 billion. The following transactions would take place:

- Fund redeems \$60 billion in Treasury securities (credit).
- Treasury pays \$60 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 \$60 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 funding obligations. Under the pay-as-you-go method, the retirement expenses would not necessarily be considered in the initial decision since they would not emerge for 20 years.

In their prior quadrennial reports to the President and Congress, the DoD Board has noted that the establishment of the Fund does not represent actual advance funding. Real advance funding could be achieved by investing the assets outside the Unified Budget, for example, in stocks or corporate bonds, or in bonds of state and local municipalities or quasi-federal government agencies (like Fannie Mae or Freddie Mac). Instead, the accrual accounting procedure now in place is essentially an internal cost accounting system. While the nation has not technically set aside money to pay the benefits of those who have served in uniform, the Fund can be viewed as earmarking future tax receipts for the benefit of military retirees. As such, the existence of the Fund promotes a measure of "psychological security" for military members.

Along these same lines, the DoD Board has frequently noted two common misconceptions about the Fund:

- 1) The Fund represents government tax receipts that have been accumulated in the past. Actually, the Fund represents future tax receipts that will be allocated to pay principal and interest on government bonds being held by the Fund.
- 2) The financial and actuarial status of the Fund can be measured by prospective short-term (or medium-term) cash flows. Rather, the entire present value of the liabilities must be compared to the sum of the Fund and prospective contributions. A year-by-year projection of cash flow is also needed to measure the Fund's ability to pay annual benefits. Comparing the past and projected dollars as a proportion of payroll (as shown in Table 8) is another key measure of sustainability.

The current financing procedure, although carried out by allocating no more tax dollars than needed to pay benefits to military retirees as they come due, has nonetheless contributed to a more accurate allocation of resources within the defense budget and to formal recognition--in the national debt--of the government's obligation to pay retirement benefits to military members and eligible survivors/annuitants. This represents more responsible fiscal practice than would obtain under a pay-as-you-go system.

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.

The actuarially based costs of the retirement system are reasonable given the plan provisions, and the system is considered sustainable assuming continuing willingness of the government to pay the required costs.

APPENDIX A

THE MILITARY RETIREMENT SYSTEM: BENEFITS

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THE MILITARY RETIREMENT SYSTEM: BENEFITS

As of September 30, 2018

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.

Generally, 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, with certain exceptions. Public Law (P.L.) 110-181 allows for a day-for-day reduction (in 90 day continuous periods) in the reserve retirement eligibility age from age 60 (to an age no lower than 50) for every 3 months served in a contingency operation or national emergency, for service after enactment. There is no vesting of benefits before retirement.

There are distinct nondisability benefit formulas related to four populations within the Military Retirement System. A summary is displayed in Tables B-1 and B-2 (see Appendix B).

- 1) *Final Pay*: Military personnel who first became members of a uniformed service <u>before September 8, 1980</u>, 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 <u>on or after</u> 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: Those 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). The National Defense Authorization Act for FY 2016 (NDAA 2016, P.L. 114-92) sunsets the CSB/Redux benefit tier by not allowing any CSB elections after December 31, 2017, and repeals all aspects of the Bipartisan Budget Act (BBA) 2013.

4) Blended Retirement System (BRS): Members who first become a member of a uniformed service after December 31, 2017, are covered under the new Blended Retirement System (BRS) which was enacted in NDAA 2016 and took effect January 1, 2018. Members who first entered the military before January 1, 2018, and who have served for fewer than 12 years (or for reservists, who have fewer than 4,320 points) as of December 31, 2017, have the option to "opt-in" to BRS via an irrevocable election during the one-year (calendar year 2018) open season or remain in the High-3 system. Members who have served 12 or more years as of December 31, 2017, are not permitted to opt-in to BRS and will receive benefits based on their current plan. As a result of NDAA 2016, members with 12 or more but fewer than 15 years of service as of December 31, 2017, will not have the opportunity to opt-in to BRS or to elect the CSB and will automatically remain in the High-3 system¹. The BRS lowers the nondisabled retired pay multiplier from 2.5 percent per year to 2.0 percent and includes automatic and matching government contributions to member Thrift Savings Plan (TSP) accounts and a mandatory mid-career continuation bonus if the member agrees to serve additional time. The BRS also provides members the choice of receiving a portion (either 25 percent or 50 percent) of their retired pay entitlement from when the member is eligible to begin receiving retired pay to normal Social Security retirement age (usually 67) as a discounted lump sum instead of an annuity. For additional information, see Table B-1 or refer to the DoD Office of Military Compensation website (http://militarypay.defense.gov/).

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. Receiving a benefit adjustment based on the percentage increase in the CPI 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 percent), 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 restoral is in combination with the elimination of the multiplier penalty for retiring with less than 30 years of service. However, after this restoral, partial indexing (CPI minus 1 percent) continues for future retired pay and survivor annuity payments.

The FY 2011 NDAA (P.L. 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. This legislation did not apply to survivor annuitant pay and Combat-Related Special Compensation, which were included in later legislation. This results in retirees receiving 13 payments in some fiscal years and 11 payments in others, with 12 payments

¹ Because of breaks in service and technical differences in the definition of qualifying years of service under BRS compared to CSB/Redux, it's not possible to precisely define this group based solely on dates of entry, but generally it will include members who joined the service after December 31, 2002, and on or before December 31, 2005.

occurring in a typical fiscal year. Note that annual fiscal year amounts shown throughout this report represent 12 monthly payments without regard to the 2011 NDAA. Comments regarding this law are also noted in the Table 8 footnotes in the main text.

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. Refer to the prior section for a description of the four benefit tiers of nondisability retirement.

As of September 2018, 1.47 million nondisability retirees from active duty and full-time reserves were receiving an annualized retired pay entitlement totaling \$46.7 billion. Included in this number are a reported 75,678 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:

- (1) based upon accepted medical principles, is of a permanent nature and stable;
- (2) was incurred while entitled to basic pay (or while on authorized absence in a status not entitled to basic pay);
- (3) is neither the result of the member's intentional misconduct nor willful neglect;
- (4) was not incurred during a period of unauthorized absence; and
- (5) either
 - (a) the member has at least 20 years of service; or
 - (b) 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 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 nondisability retirement benefit regardless of eligibility to retire; or
- (2) base pay multiplied by the rated percent of disability.

Except for members with a multiplier under (1) that is greater than 75 percent (which will equate to different years of service depending on whether the member is under BRS), 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, except that for retirees placed on this list after December, 31, 2016 the final determination must be made within three years². 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. Members who are under BRS and who retire for disability do not have the option of receiving a portion of retired pay as a discounted lump sum.

As of September 2018, 123,000 disability retirees were receiving an annualized retired pay entitlement totaling \$1.72 billion. Included in this number are a reported 4,217 disability retirees who elected CSB/Redux.

Reserve Retirement

Members of the Reserve Components 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 specified in NDAA 2008 (P.L. 110-181), in which case the age is reduced below 60 by three months for every 90 days of such service within any two consecutive fiscal years. However, the age cannot be reduced below 50, and eligibility for subsidized retiree health benefits remains at age 60 even if the eligibility age for retired pay is reduced. For members not under BRS, retired pay is computed as retired pay base times 2.5 percent times years of service. For members under BRS (as explained below) the 2.5 percent multiplier is reduced to 2.0 percent. If the reservist was first a member of a uniformed service before September 8, 1980, retired pay base 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, retired pay base 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 the age at which retired pay commences. The years of service are determined by using a point system, where 360 points convert to a year of service.

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² The 2017 National Defense Authorization Act lowered the maximum length on the temporary-disability retired list from 5 years to 3 years, with grandfathering for those currently on the list.

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 may 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 an active reserve status. 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.

Reservists who first became a member on or before December 31, 2017, and had fewer than 4,320 points (equating to 360 points per year multiplied by 12 years of service) as of that date are eligible to opt-in to BRS. Reservists who first become a member of the uniformed service after December 31, 2017, are automatically under BRS. For reserve retirement under BRS, the discounted lump sum option covers the period from the date the member first became eligible to receive retired pay (i.e., 60 or earlier if certain qualifying service is performed) to normal Social Security retirement age (usually 67).

As of September 2018, 412,000 reserve retirees were receiving an annualized retired pay entitlement totaling \$6.7 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 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, SBP'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.

Members who die on active duty are 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 it is more beneficial for the survivors to have elected child only because of Dependency and Indemnity Compensation (DIC) offsets, the family has the option to make that election instead. If the death does not occur in the line of duty, 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. These benefits have been improved and expanded over the history of the program.

The surviving spouse (or dependent children, if there is no surviving spouse or if the spouse subsequently dies) of a reservist who dies in the line of duty while performing IDT service is entitled to an SBP annuity. Due to NDAA 2017, effective December 23, 2016 reservists who die in the line of duty while performing IDT receive an SBP annuity equivalent to what they would have received if they had died in the line of duty on active duty (i.e., the annuity assumes the reservist retired with 100% disability rating and elected full SBP on the date of death). Prior to this legislation, the annuity was based on the reservist's years of service.

SBP annuities generally are reduced by any VA survivor benefits (Dependency and Indemnity Compensation (DIC)), and all premiums relating to the reductions are returned to the survivor. The FY 2008 NDAA enacted, and subsequent legislation extended, a temporary Special Survivor Indemnity Allowance (SSIA) that pays a monthly amount (\$50 in FY 2009 grading up to \$310 in FY 2017 and FY 2018) to survivors with a DIC offset. Prior to NDAA 2018 the authority for the allowance ended in May 2018; the NDAA 2018 made it a permanent benefit with annual COLA increases.

As a result 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 with retired pay, SBP annuities and premiums are increased annually 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.

On June 26, 2013, the U.S. Supreme Court ruled to overturn the Defense of Marriage Act (DOMA). While not a change to Title 10 U.S. military benefits per se, the ruling has the effect of allowing legal spouses of same-sex marriages to be eligible to receive SBP benefits.

SBP premiums for members who elect lump sums under BRS will be equivalent to what they would have been without the lump sum, and consequently, the survivors' annuities will be equivalent to what they would have been without the lump sum. The maximum base amount will be equal to unreduced retired pay (i.e., ignoring the lump sum), premiums will be deducted only from monthly retired pay received, and SBP benefits will commence upon the retiree's death.

As of September 2018, 321,000 survivors of military members were receiving an annualized annuity and/or SSIA entitlements totaling \$3.9 billion. Included in these totals, there are 65,000 SSIA survivors receiving \$0.2 billion (approximately 24,000 receive survivor pay as well).

Temporary Early Retirement Authority (TERA)

The FY 1993 NDAA (P.L. 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 originally expired on September 1, 2002.

The FY 2012 NDAA (P.L. 112-81) reinstated TERA, from January 2012 through December 2018, but without the qualified public service provision. The FY 2017 NDAA further extended TERA through December 2025.

As of September 2018, 68,500 TERA retirees were receiving an annualized retired pay entitlement totaling \$1.3 billion.

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. Recent retirees/annuitants receive a prorated COLA depending on their date of retirement/eligibility.

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 percent). 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. Note that the FY 2016 NDAA sunsets the CSB/Redux benefit tier by not allowing any CSB elections after December 31, 2017.

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 FY 2004 NDAA (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. 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 P.L. 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."

For members who elect lump sums under BRS and qualify for VA disability compensation: (1) if the member is not eligible for CRDP or CRSC, the VA will withhold disability payments until the amount withheld equals the lump sum amount, after which VA disability payments, as an offset to retired pay, may be paid; (2) if the member is eligible for CRDP, no withholding of VA disability payments is required, and the retiree may receive VA disability compensation and retired pay without offset; and (3) if eligible for CRSC, the procedures for withholding VA disability payments are more complicated and relate to the portion of the total VA entitlement considered combat-related.

VA benefits also offset (or reduce) survivor pay through the Dependency and Indemnity Compensation (DIC) program. DIC benefits are 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 FY 2008 NDAA enacted, and subsequent legislation extended, a temporary Special Survivor Indemnity Allowance (SSIA) that pays a monthly amount (\$50 in FY 2009 grading up to \$310 in FY 2017 and FY 2018) to survivors with a DIC offset. Prior to NDAA 2018 the authority for the allowance ended in May 2018; the NDAA 2018 made it a permanent benefit with annual COLA increases.

As a result of the "Sharp Case" ruling, the SBP benefit of widows with entitlement to both DIC and SBP who remarry after age 57 is not reduced by DIC benefits received.

As of September 2018, there were 652,000 CRDP members and 93,000 CRSC members. These members were paid an additional monthly amount of \$1.1 billion and \$91 million, respectively. As of September 2018, there were 65,000 survivors receiving annualized SSIA benefits of \$243 million.

Interrelationship with Other Federal Service

For military 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 and Disability Fund in order to receive credit. Military service is not generally creditable under both systems (but is for reservists and certain disability retirees). Military retirees may qualify separately for Civil Service retirement and receive concurrent pay from both systems.

Relationship of Retired Pay to Military Compensation

Basic pay is the only element of military compensation upon which nondisability 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 the housing and subsistence allowances because they are not subject to federal income tax. Basic pay represents approximately 70 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. Further, such 20-year retirees (except for those who first entered service prior to September 8, 1980) receive a percentage (50 percent, or 40 percent for those under CSB/Redux or BRS) of their high 36-month average of basic pay, typically less than final basic pay. For a 30-year retiree, basic pay is approximately 74 percent of RMC and such members if entitled to 75 percent of basic pay, would only receive 55 percent of RMC. Again, note that most members currently retiring with 30 years will actually receive a percentage (75 percent, or 60 percent for those under BRS) of their high 36-month average, rather than of their final basic pay. P.L. 109-364 allows certain members, who retire on or after January 1, 2007 with sufficient years of service (greater than 37.5 years under BRS and 30 years under the other benefit formulas) to retire with entitlements exceeding 75 percent of their high 36-month average 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 employeremployee 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 2018, the Fund made monthly disbursements to approximately 2.3 million retirees and survivors.

There are many ways to measure the funding progress and performance of a pension plan. Table A-1 shows 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. Note that for a variety of reasons including investment and other constraints, the Fund's results for these "performance measures" cannot be reasonably compared to many other pension systems.

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
2011	1,273.3	376.1	807.3	897.2	29.5	46.6	4.9
2012	1,361.5	428.0	854.6	933.5	31.4	50.1	2.9
2013	1,368.6	483.5	869.5	885.1	35.3	55.6	3.1
2014	1,412.8	545.0	911.3	867.8	38.6	59.8	3.2
2015	1,417.0	600.6	919.2	816.4	42.4	65.3	1.8
2016	1,407.0	664.4	914.1	742.6	47.2	72.7	2.3
2017	1,502.0	734.1	974.0	767.9	48.9	75.4	2.9
2018	1,533.4	813.9	994.1	719.6	53.1	81.9	3.8

NOTES:
(1) From Table 6A, Item 3 in main text.
(2) From Table 6A, Item 4 in main text.
(3) From Table 6A, Item 1.a in main text.

⁽³⁾ From Table OA, Refit 1.a ii (4) = (1) - (2) (5) = (2) / (1) x 100 (6) = (2) / (3) x 100 (7) Discussed in Appendix D.

APPENDIX B

THE MILITARY RETIREMENT SYSTEM: HISTORY

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THE MILITARY RETIREMENT SYSTEM: HISTORY¹

The history of the Uniformed Services Military Retirement System in the United States extends back to the early days of the country. The history detailed in this appendix provides the user with a useful context when evaluating the status of the current system. 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, Military Compensation and Retirement Modernization Commission, etc. These studies continue to the present day – see recent legislation enacted: *Blended Retirement* System (BRS). Much discussion typically occurs as a result of the study findings. It should be noted that while there may be superficial resemblance between the Military Retirement System (MRS) and other retirement systems, there exist substantial differences, including between the MRS and the retirement plant of federal civil servants. Of significance, MRS 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."

Much of the information in this appendix can be found in *Military Compensation Background* Papers, Seventh Edition (November 2011), 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.

2) The guiding motivation behind <u>disability</u> 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 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, with each war 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 (VA) 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 fuel, quarters, and food. 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 VA, 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 four different retirement systems currently in effect for members of the uniformed services are 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 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 nondisability retirements with sufficient years of service for members retiring after December 31, 2006, and P.L. 111-383, enacted January 7, 2011, removed the cap for disability retirements after the date of enactment. A member can now retire with a retired pay multiplier greater than 100 percent if their years of service are high enough. The various percentage multipliers by year of service and benefit system are shown in Table B-2. P.L. 109-364 also removed a reduction to the rate of basic pay used in the computation of retired pay for general and flag officers (those with pay grades of O-7 through O-10) retiring after September 30, 2006.

P.L. 114-92 established the "Blended Retirement System (BRS)," a major reform to military compensation. The BRS lowers the nondisabled retired pay multiplier from 2.50% per year to 2.00% and allows for multiple retired pay distribution options. The BRS provides members (except for those who retire on disability) the choice of receiving a portion (either 25 percent or 50 percent) of their retired pay entitlement from when the member is eligible to begin receiving retired pay to normal Social Security retirement age (usually 67) as a discounted lump sum instead of an annuity. The newly established compensation system is supplemented with a Thrift Savings Plan (TSP) account government match and a mandatory mid-career continuation bonus. The changes apply to all members first entering service after December 31, 2017. Members with fewer than 12 completed years of service as of December 31, 2017, have the option to fully participate in the BRS via an irrevocable election during a one year (calendar year 2018) open season. Additionally, P.L. 114-92 sunsets the CSB/Redux benefit tier by not allowing any CSB elections after December 31, 2017, and repeals all aspects of the Bipartisan Budget Act (BBA) 2013.

<u>History of Retired Pay – Reserve Duty</u>

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 legislation authorizes further downsizing of the military during the mid-1990's, which was extended until October 1, 2001.

- P.L. 107-314 permanently reduced the required reserve service eligibility years for retired pay from eight years to six years. This law also authorized an additional 10 percent in retired pay, not to exceed 75 percent, for enlisted members (active or reserve) credited with extraordinary heroism in the line of duty during their career.
- P.L. 110-181, enacted January 28, 2008, reduces the retirement age for a reserve retirement below age 60 by three months for each aggregate of 90 days of certain active service performed (after the date of enactment) within any two (2) consecutive fiscal years with a limit of 10 years. Eligibility for subsidized retiree health benefits remains at age 60 even if the eligibility age for retired pay is reduced.
- P.L. 114-92, BRS, described in the previous section, also applies to Reserves with some differences, e.g., the eligibility threshold for opting in to BRS for Reserves is based on creditable points.

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) 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 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 and Combat Related Special Compensation) 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 <u>retiree's</u> 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.

As discussed above, P.L. 114-92 sunsets the CSB/Redux benefit tier by not allowing any CSB elections after December 31, 2017, and repeals all aspects of the Bipartisan Budget Act (BBA) 2013.

Retired pay cost-of-living increases from 1958 to the present time are shown in Table B-3. 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 remains loosely linked through present day.

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-4. 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 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, along with the Treasury contributions resulting from P.L. 108-136 and interest earnings, 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 Fund 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 full-time reservists 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, although deviations of actual compared to expected experience increase or decrease the unfunded liability over time.

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	Blended Retirement System (BRS)
Applies to Members Who Joined a Uniformed Service:	• before September 8, 1980	on or after September 8, 1980 and before August 1, 1986	on or after August 1, 1986 and before January 1, 2003 who elect to accept the Career Status Bonus (CSB) with additional 5-year service obligation	• on or after January 1, 2018
		on or after August 1, 1986 and before January 1, 2003 who did not elect to accept the Career Status Bonus (CSB) at the 15-year anniversary		on or after January 1, 2006 and before January 1, 2018 who elect to participate in BRS
		on or after January 1, 2003 and before January 1, 2006		
		on or after January 1, 2006 and before January 1, 2018 who do not elect to participate in BRS		
Retired Pay Computation Basis	Final basic pay rate	Highest 36 months of 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)	2.0% per year of service
Cost-of-Living Adjustment Mechanism	Full CPI-W	Full CPI-W	Full CPI-W minus 1% (one-time catch-up at age 62)	Full CPI-W
Additional Benefit(s)			\$30,000 Career Status Bonus (CSB) payable at 15-year anniversary upon assumption of 5-year obligation to remain on continuous active duty	Choice of receiving a portion (either 25% or 50%) of the retired pay entillement from retirement age to normal Social Security retirement age (usually 67) as a discounted lump sum instead of an annuity
				Automatic and matching Government contributions to Thrift Savings Plan (TSP) account
				Mandatory mid-career continuation bonus if member agrees to serve additional time

Notes: - Due to breaks in service and technical differences in the definition of qualifying years of service under BRS compared to CSB/Redux, it's not possible to precisely define which systems cover the appropriate members based solely on dates of entry. These dates should be considered to be approximates.

TABLE B-2

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

Years of	Final Pay/HI-3	CSB/Redux	Multiplier	BRS
Service	Multiplier	Before Age 62	After Age 62	Multiplier
20	50.0 %	40.0 %	50.0 %	40.0 %
21	52.5	43.5	52.5	42.0
22	55.0	47.0	55.0	44.0
23	57.5	50.5	57.5	46.0
24	60.0	54.0	60.0	48.0
25	62.5	57.5	62.5	50.0
26	65.0	61.0	65.0	52.0
27	67.5	64.5	67.5	54.0
28	70.0	68.0	70.0	56.0
29	72.5	71.5	72.5	58.0
30	75.0	75.0	75.0	60.0
31	77.5	77.5	77.5	62.0
32	80.0	80.0	80.0	64.0
33	82.5	82.5	82.5	66.0
34	85.0	85.0	85.0	68.0
35	87.5	87.5	87.5	70.0
36	90.0	90.0	90.0	72.0
37	92.5	92.5	92.5	74.0
38	95.0	95.0	95.0	76.0
39	97.5	97.5	97.5	78.0
40	100.0	100.0	100.0	80.0
41	102.5	102.5	102.5	82.0
42	105.0	105.0	105.0	84.0
43	107.5	107.5	107.5	86.0
44	110.0	110.0	110.0	88.0
45	112.5	112.5	112.5	90.0
46	115.0	115.0	115.0	92.0
47	117.5	117.5	117.5	94.0
48	120.0	120.0	120.0	96.0
49 50	122.5	122.5 125.0	122.5 125.0	98.0
50 51	125.0 127.5	125.0	125.0	100.0 102.0
:	127.3	127.3	127.3	102.0

⁻ For additional up-to-date information related to BRS, refer to the DoD Office of Military Compensation website: http://militarypay.defense.gov/

TABLE B-3
MILITARY RETIRED PAY COST-OF-LIVING INCREASES
(JUNE 1958 TO PRESENT)

Date of Increase		Percentage Increase	Cumulative % From <u>Date of Increase</u>
6/1/58		6.0 %	834.6 %
10/1/63		5.0	781.7
9/1/65		4.4	739.7
12/1/66		3.7	704.3
4/1/68		3.9	675.6
2/1/69		4.0	646.5
11/1/69		5.3	617.8
8/1/70		5.6	581.6
6/1/71		4.5	545.5
7/1/72	one percent over	4.8	517.7
7/1/73	inflation was	6.1	489.4
1/1/74 7/1/74	added during these years	5.5 6.3	455.5 426.6
1/1/75	tilese years	7.3	395.4
8/1/75		5.1	361.7
3/1/76		5.4	339.2
3/1/77		4.8	316.7
9/1/77		4.3	297.7
3/1/78		2.4	281.3
9/1/78	twice-a-year	4.9	272.3
3/1/79	increases	3.9	254.9
9/1/79		6.9	241.6
3/1/80		6.0	219.6
9/1/80		7.7	201.5
3/1/81	once-a-year	4.4	179.9
3/1/82 4/1/83	increases (Dec to Dec)	8.7 3.9 (1)	168.1 146.7
12/1/84	(Dec to Dec)	3.9 (1) 3.5 (2)	137.4
12/1/85		0.0 (3)	129.4
12/1/86	once-a-year	1.3	129.4
12/1/87	increases (3rd	4.2	126.4
12/1/88	qtr to 3rd qtr)	4.0	117.3
12/1/89		4.7	108.9
12/1/90		5.4	99.6
12/1/91		3.7	89.3
12/1/92		3.0	82.6
3/1/94		2.6 (4)	77.3
3/1/95 3/1/96		2.8 (5)	72.8
12/1/96		2.6 (6) 2.9	68.1 63.8
12/1/97		2.1	59.2
12/1/98		1.3	55.9
12/1/99		2.4	53.9
12/1/00		3.5	50.3
12/1/01		2.6	45.2
12/1/02		1.4	41.5
12/1/03		2.1	39.6
12/1/04		2.7	36.7
12/1/05		4.1	33.1
12/1/06		3.3	27.9
12/1/07		2.3	23.8 21.0
12/1/08 12/1/09		5.8 0.0	21.0 14.4
12/1/09		0.0	14.4
12/1/10		3.6	14.4
12/1/12		1.7	10.4
12/1/13		1.5	8.6
12/1/14		1.7	7.0
12/1/15		0.0	5.2
12/1/16		0.3	5.2
12/1/17		2.0	4.9
12/1/18		2.8	2.8

⁽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)

		Cumulative % From
Date of Increase	Percentage Increase	Date of Increase
6/1/58	8.3 %	1429.8 %
10/1/63	14.2	1312.5
9/1/64	2.3	1136.9
9/1/65	10.4	1109.1
7/1/66	3.2 5.6	995.2
10/1/67 7/1/68	6.9	961.2 905.0
7/1/69	12.6	840.1
1/1/70	8.1	734.9
1/1/71	7.9	672.3
11/14/71	11.6	615.8
1/1/72	7.2	541.4
10/1/72	6.7	498.3
10/1/73	6.2	460.7
10/1/74	5.5	428.0
10/1/75	5.0	400.5
10/1/76	3.6	376.6
10/1/77 10/1/78	6.2	360.1
10/1/78	5.5 7.0	333.2 310.6
10/1//9	11.7	283.8
10/1/81	14.3 (1)	243.6
10/1/82	4.0 (2)	200.6
1/1/84	4.0 (2)	189.0
1/1/85	4.0	177.9
10/1/85	3.0	167.2
1/1/87	3.0	159.4
1/1/88	2.0	151.9
1/1/89	4.1	146.9
1/1/90	3.6	137.2
1/1/91	4.1	129.0
1/1/92 1/1/93	4.2 3.7	120.0 111.1
1/1/94	2.2	103.6
1/1/95	2.6	99.2
1/1/96	2.4	94.1
1/1/97	3.0	89.6
1/1/98	2.8	84.1
1/1/99	3.6	79.0
1/1/00	4.8 (3)	72.8
1/1/01	3.7 (3)	64.9
1/1/02	4.6 (3)	59.0
1/1/03	4.1 (3)	52.0
1/1/04 1/1/05	3.7 (3)	46.0 40.8
1/1/05	3.5 3.1	36.1
1/1/07	2.2 (3)	32.0
1/1/08	3.5	29.1
1/1/09	3.9	24.8
1/1/10	3.4	20.1
1/1/11	1.4	16.1
1/1/12	1.6	14.5
1/1/13	1.7	12.7
1/1/14	1.0	10.8
1/1/15	1.0 (4)	9.7
1/1/16	1.3 (4)	8.7
1/1/17 1/1/18	2.1 2.4	7.3 5.1
1/1/18	2.4 2.6	2.6
2, 2, 2,	2.0	2.0

⁽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.

⁽⁴⁾ Excludes General and Flag Officers (O-7 through O-10), who did not receive a pay increase.

APPENDIX C

VALUATION DATA

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VALUATION DATA NOTES

The following are relevant notes to the valuation data displayed in this appendix:

- These population- and pay-related data represent the appropriate beginning counts ("inputs") to Closed Group and Open Group projections.
- Valuation input data were extracted from files maintained by 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). Active data were obtained from the Active Duty Military Personnel (ADMP) Master File, and reserve data were obtained from the Reserve Component Common Personnel Data System Master File, the official source for all component strengths and statistics, respectively.
- Active Duty and Selected Reserve personnel data were not further adjusted to match the official end strength totals supplied by the DoD Comptroller. They were each within about 0.1% of aggregate end strength totals.
- 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.
- Table-specific notes are included at the bottom of the valuation data tables.
- Some totals may not add due to rounding.

DoD Officers Active Duty Personnel by Years of Service and Age for FY 2018 Valuation

Total	0 0 12 12	52 2,354 6,894 9,175 9,979	10,444 10,803 11,092 10,831	10,216 10,351 10,515 10,321 9,879	9,817 9,362 9,232 9,168 8,459	8,099 7,462 6,887 6,291 5,750	5,430 5,137 4,897 4,025 3,258	2,640 2,169 1,651 1,337 954	765 570 438 295 534	247,868
30+	00000	00000	00000	00000	00000	00000	0 1 204 260	244 296 345 334 248	187 140 112 77	2,668
29	00000	00000	00000	00000	00000	00000	0 1113 232 148 89	238 305 188 75 63	43 37 19 10 25	1,587
28	00000	00000	00000	00000	00000	00000	127 232 161 127 299	307 177 87 76 52	34 22 15 7	1,749
27	00000	00000	00000	00000	00000	0 0 0 102	227 166 154 382 400	254 148 94 63 50	36 11 4 20 20	2,152
26	00000	00000	00000	00000	00000	0 0 107 263	223 188 471 508 317	159 117 97 61 36	20 20 28 28	2,662
25	00000	00000	00000	00000	00000	0 0 136 272 248	188 543 724 413 217	155 99 78 46 21	37 16 13 23	3,252
24	00000	00000	00000	00000	00000	2 127 301 250 200	539 782 470 261 182	93 94 85 85	22 1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3,492
23	00000	00000	00000	00000	0000-	155 329 281 211 607	816 483 307 206 145	93 75 65 54 35	28 19 4 4 5 25	3,955
22	00000	00000	00000	00000	0 0 0 209	384 348 286 676 857	558 358 296 183	89 60 45 30	29 25 14 13	4,657
21	00000	00000	00000	00000	0 0 1 310 526	391 312 779 946 577	382 323 236 172 105	% % 12 % % 3 4 5 5 8	20 = 18 8 9	5,423
90	00000	00000	00000	00000	0 4 379 665 400	312 826 1,145 731 433	349 285 194 172 130	97 68 75 44 40	32 14 21 22 28	6,439
19	00000	00000	00000	00000	5 408 670 542 359	1,060 1,477 953 526 464	389 259 271 175	115 87 73 64 38	38 28 21 33	8,215
18	00000	00000	00000	0 0 0 0 %	382 695 490 454 1,110	1,621 994 569 483 395	288 230 211 161 152	117 94 82 54 41	40 29 21 26	8,772
17	00000	00000	00000	0 0 2 6 337	663 457 381 1,075 1,643	1,005 621 468 438 306	248 202 162 134 116	124 88 46 56 34	30 10 17 20	8,722
91	00000	00000	00000	0 0 352 604	474 373 1,152 1,650 1,029	678 495 441 325 272	225 193 163 137 130	101 84 39 45 36	27 41 8 8 18	9,076
15	00000	00000	00000	0 4 269 562 497	438 1,162 1,754 1,151 666	560 445 335 281 197	161 146 127 100	58 69 46 54 35	25 23 12 9	9,330
41	00000	00000	00000	2 221 529 476 401	1,214 1,843 1,108 731 545	462 326 266 217 173	156 104 123 101 78	00 4 4 4 5 52	1 1 2 3 0	9,352
13	00000	00000	0 0 0 0 %	179 384 350 332 1,161	1,997 1,064 592 543 418	291 254 189 145 132	105 120 89 69 59	45 36 32 26 19	2 = 6	8,684
12	00000	00000	0 0 1 142	327 294 276 1,280 2,105	1,100 576 539 444 343	242 198 139 111	86 83 67 57	35 30 30 24 12	= 5 5 4 6	8,784
Ξ	00000	00000	0 0 100 211	211 241 1,328 2,217 1,156	614 519 513 348 247	154 138 103 78	65 52 61 46 31	32 33 20 23 15	8 1 9 1 6	8,698
10	00000	00000	0 1 62 149 154	201 1,280 2,367 1,211 671	563 519 362 261 215	167 110 90 82 68	61 47 61 54 32	35 27 23 8	= 8 9 - 5	8,924
6	00000	00000	0 41 101 114 159	1,337 2,560 1,418 821 594	607 405 326 229 155	132 89 73 63	49 52 35 41 33	26 26 11 14 9	r & 0 0 4	9,603
∞	00000	00000	26 61 116 159 1,376	2,566 1,530 848 708 641	460 336 232 199 149	116 87 83 84	84488	17 17 12 9	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	10,088
7	00000	0 0 0 17	65 69 1,543 2,942	1,618 873 721 652 454	365 251 180 145 113	90 70 58 31	37 38 29 15	9 11 9 8 8	24-6	10,664
9	00000	0 0 0 34	53 110 1,818 3,480 1,816	883 714 697 512 344	245 216 143 134 91	69 56 40 18	33 40 25 13	11 12 8 6	44664	11,732
S	00000	0 0 7 42	84 1,837 3,664 1,977 870	754 745 504 386 248	207 150 126 97 67	49 46 39 27 27	26 18 21 12	r 9 9 7 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	- 0 0 0 -	12,108
4	00000	0 2 7 7 88	2,004 3,898 2,086 836 665	682 472 375 251 189	148 96 89 50 49	40 25 27 27 27	18 12 13 7	11 6 6 2	0 % - 0 -	
3	00000	1 8 35 74 2,288	4,284 2,398 969 740 737	507 396 277 186 149	126 101 77 51 34	30 31 27 25 15	8 = 12 8 = 8 8 = 8	ε 4 ε c =	- 0 0 0 -	13,630
2	0 0 0 0 %	4 27 89 2,246 4,243	2,207 931 810 832 542	444 273 243 162 141	97 88 33 33	34 19 18 13	r 9 8 9 E	9 4 0 4 6	7 0 - 7 -	13,674 13,630 12,276
-			1,056 806 834 530 415					0 = 7 7 7	000	14,774
0	0 0 0 0 0 0	37 2,249 4,259 2,009 783	664 650 502 370 290	211 142 122 96 68	43 49 21 27	25 7 7 8	4 1/ 8 = 8	0 - 0	-00	12,725
Age	16 17 20	21 22 24 25 25	26 27 28 30	31 33 34 35	36 37 39 40	14 4 4 4 4 4 4 5 4 4 5 4 5 4 4 5 4 5 4 5	46 47 49 50	51 53 54 55	56 57 58 59 60+	otal

11.4

Average YAS:

DoD Enlisted Active Duty Personnel by Years of Service and Age for FY 2018 Valuation

Total	0 106 16,677 54,927 77,208	86,618 86,048 78,426 71,691 65,223	58,545 52,586 48,376 43,925 39,377	36,483 34,074 32,811 30,880 29,077	28,121 26,250 24,080 20,848 16,934	13,893 11,445 9,251 7,784 6,251	5,243 4,613 4,011 3,192 2,337	1,824 1,403 1,094 935 707	517 331 251 185 92	1,134,650
30 ⁺	00000	00000	00000	00000	00000	00000	0 39 85 67	57 35 15 22 13	= 4 4 C 8	360
29	00000	00000	00000	00000	00000	00000	2 1 2 8 6 2 2 0 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50 33 23 18	9 8 8 9 8	944
28	00000	00000	00000	00000	00000	0 0 0 0 0	133 289 232 137 76	57 37 21 16	= c + + c	1,040
27	00000	00000	00000	00000	00000	0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	302 228 138 79 50	60 34 18 12	9 6 6 6 6	1,075
26	00000	00000	00000	00000	00000	0 0 181 373	285 182 122 75 68	36 35 19 20 12	1 6 0 2 0	1,428
25	00000	00000	00000	00000	00000	0 1 284 634 504	315 185 134 91 70	49 29 30 27 16	8 <u>0</u> 8 4 £	2,402
24	00000	00000	00000	00000	00000	1 700 567 362	259 141 146 92 54	49 20 31 23	= 6 9 = 0	2,827
23	00000	00000	00000	00000	00000	473 1,126 917 557 385	296 217 146 121 84	62 52 46 32 21	71 4 1 0	4,583
22	00000	00000	00000	00000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,521 1,240 768 568 379	290 237 182 129 106	75 58 39 36 28	26 17 11 8	6,408
21	00000	00000	00000	00000	0 0 4 975 2,097	1,661 1,081 668 510 359	304 215 167 139 104	96 56 29 46 29	27 14 13 7	809'8
20	00000	00000	00000	00000	0 7 1,553 3,154 2,178	1,387 953 633 498 397	242 212 201 126 118	79 78 60 54	25 41 13 8	12,096
61	00000	00000	00000	00000	17 2,339 5,058 3,773 2,374	1,638 1,211 874 731 518	407 361 287 232 186	156 124 112 97 61	2 8 8 8 2	20,695
18	00000	00000	00000	80000	2,636 5,139 3,712 2,459 1,689	1,227 922 728 551 436	351 311 256 250 186	169 138 124 97	44 42 30 19	21,633
17	00000	00000	00000	0 0 0 13 2,482	5,137 3,786 2,504 1,796 1,329	964 790 652 496 376	321 277 255 223 154	175 113 108 74 67	49 33 31 17	22,233
16	00000	00000	00000	0 0 8 2,265 5,066	3,796 2,595 1,921 1,558 1,176	886 685 567 417 355	258 240 241 214 160	147 90 86 70 53	39 29 19 7	22,971
15	00000	00000	00000	0 5 2,189 5,170 4,106	2,944 2,149 1,600 1,266 991	778 529 438 383	258 214 232 188 182	103 81 56 63 40	48 29 19 3	24,382
4	00000	00000	00000	2,095 5,389 4,766 3,238	2,476 1,847 1,486 1,133 882	658 512 397 324 274	218 221 175 166 102	24 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	32 8 8 6	26,715
13	00000	00000	0 0 0 71	1,813 4,892 4,360 2,787 2,198	1,719 1,371 1,048 795 596	506 375 268 253 183	200 201 172 116 74	67 28 35 32	20 17 12 6	24,217
12	00000	00000	0 0 17 2,144	5,387 4,866 3,665 2,716 2,014	1,695 1,240 975 730 572	416 310 256 202 202	168 151 117 97	53 23 34 13	16 3 2 2	28,227
Ξ	00000	00000	0 1 25 2,108 5,294	4,529 3,408 2,652 2,181 1,704	1,288 1,022 732 579 455	320 286 204 209 167	163 136 121 91 78	59 61 32 23 17	15 9 4 0	27,978
10	00000	00000	0 2,248 5,555 4,882	3,614 2,820 2,313 1,770 1,320	1,062 859 647 502 335	281 223 174 166 132	93 87 87 94	49 45 18 12	3 5 3 6 9	29,482
6	00000	00000	3 1,966 5,652 5,634 4,205	3,380 2,617 2,209 1,772 1,217	1,001 756 556 385 346	240 195 156 144 109	113 95 78 73 54	40 22 15 7 7	v w r c v w	33,076
œ	00000	0 0 0 0 0	1,799 5,829 6,788 5,176 3,870	3,234 2,696 2,177 1,555 1,252	976 723 551 408 336	265 204 211 130 113	92 91 70 49 53	22 21 22 9 9	3 3 9	38,739
7	00000	0 0 3 2,376	7,843 8,129 5,684 4,220 3,352	2,865 2,104 1,648 1,228 998	734 492 370 306 234	190 145 190 89	69 65 51 47	5 = 7 8	v 4 E C O	43,611
9	00000	0 0 5 3,259 10,246	10,015 7,017 5,151 4,053 3,389	2,557 1,949 1,445 1,107 796	563 422 310 262 208	203 97 56 54 40	35 27 29 19	13 5 7 9	1 - 2 2 6	53,381
ĸ	00000	0 6 4,791 14,487 13,539	9,250 6,852 5,331 4,180 3,199	2,327 1,754 1,260 901 635	491 392 321 243 190	87 49 43 32 26	21 16 15 30 20	r 9 4 9 E	1 0 0 0	70,519
4	00000	5,756 17,238 15,046 9,872	7,198 5,475 4,555 3,446 2,518	1,822 1,374 962 628 440	380 327 236 217 74	4 8 8 8 8	23 16 14 23 5	o 4 ∞ € 5	0	77,858
3	0 0 0 0 42	10,203 27,761 21,544 13,052 8,955	6,861 5,434 4,238 3,160 2,081	1,616 1,102 757 567 442	357 260 232 100 41	32 38 25 21 7	11 10 10 4 4	8 4 21 7 7	0 0	108,991
2	0 0 0 38 111,807	31,593 24,672 14,922 10,287 8,009	6,376 4,922 3,679 2,621 1,767	1,399 976 686 545 429	337 293 145 79 60	50 25 11 12	7 11 6 8	0004	0 0 0	125,850
-	0 0 61 14,017 36,669	27,821 16,405 11,189 8,551 6,808	5,206 3,979 2,856 2,161 1,567	1,148 827 657 543 434	377 143 69 73 49	42 30 13 13	4 2 6 1 6	00	0000	141,739 125,850 108,991
0	0 106 16,616 40,872 28,708	16,997 11,448 8,736 7,006 5,415	3,994 2,961 2,169 1,595 1,092	781 588 432 367 285	135 86 49 50 38	3 2 7 2 8		0 0 - 3 -	000	150,581
Age	16 17 19 20	25 25 25 25 25 25 25 25 25 25 25 25 25 2	26 27 30 30	31 33 34 35	36 37 39 40	14 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	51 53 54 55	56 57 58 59 60+	Total

All DoD Active Duty Personnel by Years of Service and Age for FY 2018 Valuation

	Total	0 106 16,677 54,929 77,220	86,670 88,402 85,320 80,866 75,202	68,989 63,389 59,468 54,756 49,698	46,699 44,425 43,326 41,201 38,956	37,938 35,612 33,312 30,016 25,393	21,992 18,907 16,138 14,075 12,001	10,673 9,750 8,908 7,217 5,595	4,464 3,572 2,745 2,272 1,661	1,282 901 689 480 626	1,382,518
	30+	00000	00000	00000	00000	00000	00000	0 1 135 289 327	301 331 360 356 261	198 144 179 130	3,029
	29	00000	00000	00000	00000	00000	00000	2 268 518 352 200	288 340 221 98 81	52 45 24 12 28	2,531
	28	00000	00000	00000	00000	00000	7 0 0 0 0	260 521 393 264 375	364 214 108 92 68	45 25 19 11 25	2,789
	27	00000	00000	00000	00000	00000	0 0 0 217	529 394 292 461 450	314 182 112 81 62	37 39 19 16 22	3,227
	26	00000	00000	00000	00000	00000	0 0 288 636	508 370 593 583 385	195 152 116 81 48	35 21 19 26 29	4,090
	25	00000	00000	00000	00000	00000	0 1 420 906 752	503 728 858 504 287	204 128 108 73 37	45 26 30 17 26	5,655
	24	00000	00000	00000	00000	00000	3 438 1,001 817 562	798 923 616 353 236	140 127 64 77 51	22 24 33	6,319
	23	00000	00000	00000	00000	0 0 0 0 -	628 1,455 1,198 768 992	1,112 700 453 327 229	155 127 111 86 56	45 28 28 25	8,539
	22	00000	00000	00000	00000	0 0 3 892	1,905 1,588 1,054 1,244 1,236	848 595 478 312 235	164 118 84 75 58	55 42 21 30	11,065
	21	00000	00000	00000	00000	0 0 1,285 2,624	2,052 1,393 1,447 1,456 937	686 538 403 311 209	162 112 107 92 65	52 25 31 15	14,031
	20	00000	00000	00000	00000	0 11,933 3,820 2,579	1,699 1,779 1,778 1,229 830	591 497 395 298 248	176 161 135 104 94	28 33 36 36	18,536
	19	00000	00000	00000	00000	22 2,747 5,728 4,315 2,733	2,698 2,688 1,827 1,257 983	796 620 558 407 296	271 211 185 161 99	104 67 15 43	28,910
	18	00000	00000	00000	0 0 0 0 0 0 7 2 7 0 0 0 0 0 0 0 0 0 0 0	3,018 5,834 4,201 2,913 2,799	2,848 1,916 1,297 1,034 832	640 542 467 411 338	286 232 207 151 118	84 72 59 40 41	30,405
	17			00000	0 0 2 19 2,819	5,800 4,242 2,885 2,871 2,972	1,969 1,411 1,120 935 683	569 479 417 357 270	299 201 154 130	79 67 41 34	30,955
e (YAS)	16			00000	0 0 10 2,617 5,670	4,270 2,968 3,073 3,209 2,205	1,565 1,180 1,008 742 627	483 433 404 351 291	248 174 125 115 89	66 43 27 30 25	32,046
of Active Service (YAS)	15	00000	00000	00000	0 9 2,458 5,732 4,603	3,382 3,311 3,354 2,417 1,657	1,339 974 773 664 500	419 360 359 316 282	161 150 102 117 75	73 52 31 23 19	33,712
of Activ	14	00000	00000	00000	13 2,317 5,919 5,242 3,640	3,690 3,691 2,594 1,864 1,426	1,120 838 663 542 447	374 325 298 267 180	147 98 98 78	52 28 20 17	36,068
Years	13	00000	00000	50000	1,992 5,276 4,710 3,119 3,359	3,716 2,436 1,641 1,338 1,014	798 629 457 398 316	306 321 261 185 133	112 90 60 61 51	37 23 8 8	32,901
	12	00000	00000	$\begin{array}{c} 0 \\ 0 \\ 0 \\ 18 \\ 2,286 \end{array}$	5,714 5,160 3,941 3,996 4,118	2,794 1,816 1,514 1,173 915	659 508 395 321 313	254 234 184 173 134	88 90 53 25	27 17 15 6	37,011
	=	00000	00000	0 25 2,209 5,505	4,740 3,649 3,980 4,397 2,860	1,901 1,541 1,246 927 703	474 424 307 313 245	228 188 182 137	2 4 23 4 25	9 0 0 0	36,676
	10	00000	00000	0 21 2,311 5,703 5,036	3,815 4,100 4,680 2,981 1,991	1,625 1,378 1,009 763 550	448 333 264 201	154 141 139 124 78	84 72 52 29 20	20 14 9 8	38,406
	6	00000	00000	3 2,008 5,753 5,749 4,364	4,717 5,177 3,627 2,593 1,810	1,608 1,161 882 615 502	372 284 229 207 170	163 147 113 87	66 48 26 21 24	12 8 13 7	42,679
	œ	00000	7 0 0 0 0	1,825 5,890 6,905 5,335 5,246	5,799 4,226 3,026 2,263 1,893	1,436 1,059 782 607 485	381 283 285 213 162	137 134 114 85 75	39 23 18 26	16 9 4 4 3	48,828
	7	00000	0 0 0 3 2,393	7,908 8,198 5,812 5,763 6,293	4,483 2,977 2,369 1,880 1,452	1,099 743 550 451 347	280 250 204 151	001 90 90 97 44	24 22 23 15 16	10 6 3 3	54,275
	9	00000	0 0 5 3,266 10,280	10,068 7,127 6,969 7,532 5,205	3,440 2,663 2,141 1,619 1,140	808 638 453 396 299	272 140 112 94 58	89 09 8 4 4 42	27 17 18 13	01 6 8 4 8	65,113
	S	00000	0 6 4,799 14,517 13,582	9,335 8,689 8,994 6,157 4,068	3,081 2,499 1,765 1,287 882	698 542 447 340 257	136 95 82 83 59	47 34 42 34	41 10 10 5	04000	82,627
	4	00000	5 5,758 17,246 15,072 9,960	9,202 9,373 6,641 4,282 3,183	2,504 1,846 1,337 879 629	528 423 325 268 123	85 68 71 71 50	41 26 31 12	20 10 13 9	- 4 0	90,134
	3	0 0 0 74	10,204 27,768 21,579 13,126 11,243	11,145 7,832 5,207 3,901 2,817	2,122 1,498 1,033 753 591	483 361 309 152 75	62 82 84 82 82	24 23 21 12	= 8 ° 6 8	04	122,620
	2	0 0 0 38 11,812	31,597 24,700 15,010 12,533 12,252	8,583 5,853 4,489 3,453 2,309	1,843 1,249 930 707 570	434 381 195 112 99	88 8 4 4 2 2 2 2 5 2 5 2 5 2 5 2 5 5 5 5 5 5	14 17 17 17	3 8 7 8 8	2 0 2 3 -	139,524
	-	0 0 61 14,017 36,671	27,830 16,472 13,686 13,334 9,292	6,262 4,785 3,690 2,691 1,983	1,443 1,049 843 654 549	448 194 107 71	72 52 34 34 16	s = = 5 4	0 - 3 3	0 0 0 0	163,306 156,512 139,524 122,620 90,134
	0	0 106 16,616 40,874 28,713	17,033 13,697 12,995 9,015 6,198	4,658 3,611 2,671 1,964 1,383	992 731 555 463 353	178 135 78 71 65	24 24 10 10	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	- 4	2 1 1 1 0	163,306
	Age	16 17 18 19 20	2 2 2 2 2	30 28 27 30 30 30 30 30 30 30 30 30 30 30 30 30	31 32 33 34 35	36 37 38 39 40	42 43 44 45	50 84 84 85 85 85 85 85 85 85 85 85 85 85 85 85	2 2 2 2 2	% 28 88 60+	Total

DoD Office of the Actuary

Average YAS:

29.3

DoD Officers Average Monthly Active Duty Basic Pay by Active Years of Service and Age for FY 2018 Valuation

Avg	\$0 \$0 \$3,116 \$3,468	\$3,251 \$3,206 \$3,220 \$3,498 \$4,078	\$4,639 \$5,046 \$5,279 \$5,461 \$5,586	\$5,724 \$5,924 \$6,185 \$6,424 \$6,616	\$6,801 \$7,015 \$7,226 \$7,450 \$7,699	\$7,882 \$8,042 \$8,217 \$8,428 \$8,699	\$8,942 \$9,159 \$9,320 \$9,532 \$9,744	\$9,929 \$10,115 \$10,172 \$10,146 \$10,186	\$10,366 \$10,297 \$10,475 \$10,597 \$10,511	\$6,618
30±	88888	88888	88888	88888	88888	88888	\$0 \$9,521 \$9,008 \$9,418 \$9,723	\$9,830 \$10,992 \$11,400 \$11,819 \$12,247	\$12,539 \$12,230 \$12,874 \$12,985 \$12,660	\$11,231
29	8 8 8 8 8	8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	\$0 \$8,867 \$8,787 \$9,070 \$9,521	\$11,421 \$11,493 \$11,551 \$11,183 \$10,855	\$11,059 \$10,804 \$10,909 \$11,107 \$11,222	\$10,487
58	8 8 8 8 8	8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	\$8,670 \$8,739 \$8,851 \$9,324 \$11,264	\$11,472 \$11,276 \$11,103 \$10,826 \$10,964	\$11,520 \$10,533 \$10,920 \$10,915 \$11,155	\$10,368
27	8 8 8 8 8	8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	\$0 \$0 \$0 \$0 \$0 \$8,169	\$8,507 \$8,582 \$8,889 \$10,767	\$10,971 \$10,729 \$10,578 \$11,061 \$10,903	\$10,974 \$10,565 \$10,672 \$11,167 \$10,397	\$10,175
56	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	\$0 \$0 \$9,521 \$8,225 \$8,249	\$8,471 \$8,814 \$10,522 \$10,923 \$10,631	\$10,415 \$10,939 \$10,719 \$10,499	\$10,154 \$11,077 \$10,440 \$10,796	\$10,027
25	\$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 \$0 \$7,874 \$7,921 \$7,996	\$8,511 \$10,108 \$10,493 \$10,361 \$10,190	\$10,067 \$10,478 \$10,409 \$10,127 \$10,070	\$10,343 \$10,281 \$10,785 \$9,617 \$10,856	89,729
24	\$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$8,798 \$7,727 \$7,805 \$7,866 \$8,284	\$10,087 \$10,421 \$10,261 \$10,108 \$9,953	\$10,366 \$10,399 \$10,235 \$9,967 \$10,079	\$10,247 \$10,294 \$10,356 \$10,955 \$10,711	89,68
23	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80	\$0 \$0 \$0 \$0 \$0 \$8,074	\$7,545 \$7,604 \$7,633 \$8,031 \$9,921	\$10,104 \$9,958 \$9,818 \$9,881 \$9,978	\$9,928 \$9,724 \$9,821 \$9,694 \$9,655	\$10,412 \$9,928 \$9,951 \$10,718	\$9,401
22	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80	\$0 \$0 \$0 \$0 \$7,446	\$7,420 \$7,495 \$7,874 \$9,500 \$9,810	\$9,592 \$9,404 \$9,432 \$9,641 \$9,493	\$9,859 \$9,993 \$9,793 \$10,159 \$9,622	\$9,917 \$9,936 \$9,504 \$10,332	180,68
21	\$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			\$0 \$0 \$8,074 \$7,162 \$7,259	\$7,306 \$7,542 \$8,900 \$9,140 \$9,089	\$8,947 \$9,165 \$9,342 \$9,164 \$9,351	\$9,428 \$9,415 \$9,281 \$9,568 \$9,585	\$9,572 \$9,230 \$9,993 \$10,095	\$8,607
20	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80	\$0 \$7,091 \$7,039 \$7,102 \$7,174	\$7,402 \$8,719 \$8,956 \$8,932 \$8,806	\$9,014 \$9,140 \$9,015 \$8,981 \$9,376	\$9,404 \$9,777 \$9,384 \$9,364 \$8,508	\$9,558 \$9,743 \$9,743 \$9,288 \$9,570	\$8,473
19	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80	\$6,683 \$6,821 \$6,838 \$7,026 \$7,232	\$8,421 \$8,672 \$8,581 \$8,477 \$8,661	\$8,705 \$8,717 \$8,895 \$8,927 \$8,940	\$9,226 \$9,185 \$9,325 \$9,243 \$9,316	\$8,985 \$9,179 \$9,204 \$9,426 \$9,344	\$8,259
8	88888	88888	88888	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$	\$6,643 \$6,736 \$6,832 \$7,164 \$8,393	\$8,559 \$8,482 \$8,366 \$8,604 \$8,665	\$8,628 \$8,576 \$8,740 \$8,866 \$8,962	\$8,992 \$9,101 \$9,325 \$9,312 \$9,102	\$9,079 \$9,081 \$8,768 \$9,638 \$9,304	\$8,181
17	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 20 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 \$0 \$6,660 \$6,660 \$6,232	\$6,349 \$6,489 \$6,795 \$8,102 \$8,332	\$8,279 \$8,123 \$8,172 \$8,341 \$8,283	\$8,395 \$8,533 \$8,614 \$8,756 \$8,719	\$9,100 \$8,847 \$8,592 \$9,045 \$8,938	\$8,976 \$8,826 \$8,996 \$9,485	\$7,934
16	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 20 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 \$0 \$7,582 \$6,058 \$6,213	\$6,300 \$6,657 \$7,885 \$8,083 \$8,038	\$7,944 \$8,017 \$8,152 \$8,247 \$8,237	\$8,295 \$8,374 \$8,582 \$8,565 \$8,479	\$8,539 \$9,000 \$8,725 \$8,484 \$8,647	\$9,384 \$9,147 \$10,560 \$8,734 \$9,307	\$7,763
15	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 20 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 \$5,749 \$5,763 \$5,866 \$6,010	\$6,280 \$7,516 \$7,732 \$7,648 \$7,649	\$7,729 \$7,774 \$7,835 \$7,847 \$8,030	\$8,104 \$8,075 \$8,297 \$8,676 \$8,595	\$8,753 \$8,689 \$8,603 \$8,946 \$8,519	\$8,993 \$9,416 \$8,814 \$8,757 \$8,831	\$7,456
4	\$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$5,534 \$5,622 \$5,727 \$5,877 \$6,119	\$7,350 \$7,604 \$7,493 \$7,476 \$7,524	\$7,619 \$7,722 \$7,714 \$7,808 \$7,885	\$7,991 \$8,108 \$8,111 \$8,204 \$8,533	\$8,647 \$8,432 \$8,805 \$8,499 \$8,087	\$8,982 \$9,812 \$8,465 \$8,549 \$8,577	\$7,319
13	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 20 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 \$0 \$0 \$0 \$5,584	\$5,229 \$5,334 \$5,527 \$5,828 \$7,187	\$7,376 \$7,333 \$7,304 \$7,381 \$7,497	\$7,541 \$7,585 \$7,616 \$7,728 \$7,861	\$7,824 \$8,064 \$8,078 \$8,379 \$8,293	\$8,197 \$8,204 \$8,343 \$8,213 \$8,300	\$8,844 \$7,808 \$9,300 \$8,684 \$8,730	\$7,168
12	8 8 8 8 8	8 8 8 8 8	\$0 \$0 \$0 \$4,662 \$5,072	\$5,209 \$5,329 \$5,760 \$7,199 \$7,353	\$7,259 \$7,163 \$7,360 \$7,443 \$7,424	\$7,468 \$7,424 \$7,492 \$7,678 \$7,810	\$7,716 \$8,109 \$8,084 \$8,102 \$8,432	\$8,409 \$8,370 \$8,183 \$8,011 \$7,743	\$8,491 \$9,247 \$8,490 \$8,669 \$9,549	\$7,148
Ξ	8 8 8 8 8	8 8 8 8 8	\$0 \$0 \$4,861 \$4,994	\$5,032 \$5,537 \$6,879 \$7,037 \$6,961	\$6,876 \$7,033 \$7,099 \$7,200 \$7,243	\$7,352 \$7,290 \$7,552 \$7,426 \$7,441	\$7,634 \$7,731 \$7,607 \$7,551 \$7,891	\$7,865 \$7,821 \$8,076 \$8,045 \$8,368	\$7,965 \$8,639 \$8,819 \$8,092 \$7,717	\$6,903
10	8 8 8 8 8	8 8 8 8 8	\$0 \$5,084 \$4,853 \$4,835 \$5,070	\$5,514 \$6,701 \$6,792 \$6,759 \$6,705	\$6,886 \$6,985 \$7,025 \$7,046 \$7,134	\$7,191 \$7,213 \$7,354 \$7,320 \$7,361	\$7,374 \$7,621 \$7,431 \$7,869 \$7,351	\$7,725 \$7,850 \$7,806 \$8,548 \$7,491	\$7,624 \$7,965 \$8,721 \$7,236 \$8,711	\$6,771
6	8 8 8 8 8	8 8 8 8 8	\$0 \$4,426 \$4,664 \$4,910 \$5,460	\$6,140 \$6,242 \$6,355 \$6,370 \$6,443	\$6,507 \$6,604 \$6,608 \$6,775 \$6,931	\$6,837 \$7,063 \$7,040 \$6,972 \$7,097	\$7,041 \$6,959 \$7,247 \$7,156 \$7,535	\$7,148 \$7,561 \$7,711 \$7,737 \$7,733	\$7,197 \$8,022 \$8,674 \$0 \$6,764	\$6,350
∞	8 8 8 8 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$4,709 \$4,626 \$4,946 \$5,379 \$6,139	\$6,184 \$6,157 \$6,160 \$6,269 \$6,400	\$6,471 \$6,527 \$6,587 \$6,680 \$6,784	\$6,769 \$6,897 \$6,994 \$6,936 \$6,915	\$7,051 \$7,210 \$7,134 \$7,307 \$7,703	\$7,555 \$7,726 \$8,610 \$7,810 \$7,899	\$8,571 \$9,339 \$7,236 \$8,756 \$10,070	\$6,269
7				\$5,960 \$5,908 \$5,957 \$6,106 \$6,107	\$6,205 \$6,354 \$6,324 \$6,406 \$6,624	\$6,692 \$6,591 \$6,643 \$6,705 \$6,609	\$6,896 \$7,347 \$6,701 \$7,227 \$7,776	\$7,552 \$7,708 \$7,963 \$7,028 \$8,040	\$7,753 \$8,379 \$8,508 \$11,901 \$7,964	86,009
9	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 \$0 \$4,004 \$3,941	\$4,641 \$5,139 \$5,880 \$5,910 \$5,890	\$5,812 \$5,936 \$6,001 \$6,050 \$6,065	\$6,122 \$6,355 \$6,500 \$6,472 \$6,493	\$6,701 \$6,571 \$6,611 \$6,725 \$6,669	\$7,176 \$6,786 \$7,221 \$7,085 \$7,039	\$7,308 \$7,907 \$8,026 \$7,538 \$7,918	\$6,913 \$7,998 \$7,289 \$7,024 \$7,640	\$5,962
50	88888	\$0 \$0 \$3,814 \$4,013 \$4,209	\$4,968 \$5,626 \$5,667 \$5,691 \$5,551	\$5,570 \$5,619 \$5,627 \$5,704 \$5,796	\$5,937 \$5,881 \$6,282 \$6,032 \$6,266	\$6,203 \$6,388 \$6,324 \$6,782 \$6,746	\$6,666 \$6,963 \$6,851 \$6,296 \$7,509	\$7,040 \$8,720 \$7,661 \$9,191 \$7,704	\$6,434 \$8,177 \$0 \$0 \$11,901	\$5,682
4	8 8 8 8 8	\$0 \$3,733 \$3,859 \$4,248 \$4,759	\$5,526 \$5,542 \$5,528 \$5,451 \$5,525	\$5,552 \$5,626 \$5,601 \$5,682 \$5,759	\$5,828 \$5,964 \$5,851 \$6,094 \$6,061	\$6,359 \$5,808 \$6,221 \$6,521 \$6,224	\$6,923 \$7,248 \$7,138 \$6,837 \$7,463	\$7,869 \$6,918 \$7,412 \$8,067	\$0 \$7,466 \$10,841 \$0 \$10,563	\$5,570
m	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$				\$5,621 \$5,816 \$5,704 \$5,908 \$5,807					\$4,968
2	\$0 \$0 \$0 \$0 \$0 \$0	\$3,852 \$3,539 \$3,642 \$4,143 \$4,195	\$4,288 \$4,253 \$4,383 \$4,635	\$4,673 \$4,697 \$5,021 \$5,166 \$5,182	\$5,271 \$5,131 \$5,540 \$5,341 \$5,257	\$5,528 \$5,653 \$5,560 \$5,391 \$5,851	\$5,910 \$5,375 \$5,905 \$7,133 \$6,989	\$7,666 \$5,491 \$0 \$5,962 \$9,221	\$7,382 \$10,181 \$7,236 \$0 \$6,129	\$4,361
-	\$0 \$0 \$0 \$0 \$3,116	\$3,179 \$3,258 \$3,231 \$3,290 \$3,442	\$3,518 \$3,717 \$3,960 \$3,980 \$4,076	\$4,206 \$4,255 \$4,251 \$4,290 \$4,486	\$4,849 \$4,968 \$5,093 \$5,431 \$5,410	\$5,149 \$4,730 \$4,862 \$5,176 \$5,117	\$7,706 \$5,754 \$5,423 \$4,939 \$5,201	\$4,544 \$6,873 \$5,501 \$8,831	\$5,597 \$7,268 \$0 \$0 \$0	\$3,539
0	\$0 \$0 \$0 \$3,116 \$3,134	\$3,178 \$3,198 \$3,196 \$3,219 \$3,262	\$3,560 \$3,800 \$3,844 \$3,827 \$3,976	\$4,189 \$4,137 \$4,001 \$4,125 \$4,25	\$4,131 \$4,164 \$4,025 \$4,488 \$4,501	\$4,493 \$4,579 \$4,290 \$4,814 \$4,283	\$4,773 \$4,253 \$5,306 \$7,991 \$5,327	\$0 \$3,188 \$0 \$4,252 \$5,971	\$10,075 \$0 \$4,252 \$5,604 \$0	\$3,388
Age	, 16 17 18 19 20	22 23 24 25	26 27 29 30	31 33 34 35	36 37 39 40	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	46 47 48 49 50	52 53 54 55	56 57 58 59 60+	Avg

Notes: Basic pay figures reflect the January, 2019, increase of 2.6%.

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

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DoD Enlisted Average Monthly Active Duty Basic Pay by Active Years of Service and Age for FY 2018 Valuation

	Avg	\$0 \$1,732 \$1,758 \$1,834 \$1,960	\$2,099 \$2,233 \$2,346 \$2,443 \$2,539	\$2,635 \$2,749 \$2,883 \$3,013 \$3,159	\$3,295 \$3,446 \$3,614 \$3,769 \$3,917	\$4,070 \$4,215 \$4,346 \$4,453 \$4,556	\$4,666 \$4,787 \$4,887 \$5,021 \$5,137	\$5,252 \$5,355 \$5,419 \$5,377 \$5,423	\$5,426 \$5,427 \$5,436 \$5,556 \$5,672	\$5,583 \$5,632 \$5,741 \$5,674 \$5,410	\$2,945
	30+	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8 8	\$0 \$0 \$7,442 \$7,475 \$7,397	\$7,452 \$7,518 \$7,649 \$7,560 \$7,492	\$7,002 \$6,077 \$6,366 \$7,475 \$4,108	\$7,368
	29	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 80 80 \$0 80 80	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 80 80 \$0 80 80	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 80 80 \$0 80 80	\$7,119 \$7,106 \$7,119 \$7,143 \$7,125	\$7,200 \$7,184 \$7,164 \$7,323 \$7,261	\$7,288 \$7,391 \$7,793 \$7,119 \$7,238	\$7,146
	78	88888	88888	88888	88888	88888	S0 S	\$7,104 \$7,112 \$7,107 \$7,146 \$7,146	\$7,182 \$7,148 \$7,275 \$7,072 \$7,127	\$6,984 \$7,055 \$7,582 \$7,160 \$7,681	\$7,130
	27	8 8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8 8	\$0 \$0 \$0 \$0 \$7,077	\$7,071 \$7,040 \$7,047 \$7,084 \$7,122	\$7,159 \$7,106 \$6,965 \$6,894 \$7,389	\$6,697 \$7,849 \$7,190 \$7,006 \$7,119	\$7,071
	26	8 8 8 8 8	8 8 8 8 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	8 8 8 8 8	\$0 \$0 \$7,119 \$6,952 \$6,927	\$6,912 \$6,870 \$6,943 \$6,968 \$6,896	\$6,969 \$7,003 \$6,932 \$7,034 \$7,147	\$6,468 \$7,681 \$0 \$6,993 \$6,993	\$6,927
	25	8 8 8 8 8	8 8 8 8	8 8 8 8 8	8 8 8 8 8	8 8 8 8	\$0 \$5,747 \$6,183 \$6,255 \$6,290	\$6,254 \$6,344 \$6,285 \$6,243 \$6,243	\$6,398 \$6,307 \$6,382 \$6,655 \$6,429	\$6,674 \$6,826 \$6,455 \$5,531 \$6,118	\$6,276
	24	8 8 8 8 8	80 80 80 80	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	8 8 8 8 8	\$4,047 \$6,096 \$6,080 \$6,107 \$6,085	\$6,036 \$6,125 \$6,043 \$6,185 \$6,211	\$6,176 \$6,178 \$6,162 \$6,127 \$6,18	\$5,829 \$6,412 \$5,813 \$5,875 \$0	\$6,093
	23	8 8 8 8 8	8 8 8 8 8	\$ \$ \$ \$ \$ \$ \$ \$	S S S S S	8 8 8 8	\$5,601 \$5,599 \$5,575 \$5,566 \$5,666	\$5,601 \$5,693 \$5,779 \$5,707 \$5,828	\$5,728 \$5,836 \$5,771 \$5,844 \$5,775	\$5,888 \$5,532 \$6,166 \$5,394 \$0	\$5,620
	22	80 80 80 80 80 80 80 80 80 80 80 80 80 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$0 \$0 \$0 \$5,473 \$5,496	\$5,450 \$5,474 \$5,466 \$5,473 \$5,473	\$5,494 \$5,571 \$5,577 \$5,480 \$5,726	\$5,758 \$5,815 \$5,870 \$5,653 \$6,092	\$5,973 \$5,627 \$5,695 \$5,859 \$5,885	\$5,495
	21	80 80 80 80 80 80 80 80 80 80 80 80 80 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$0 \$0 \$5,443 \$5,141 \$5,123	\$5,147 \$5,124 \$5,136 \$5,175 \$5,253	\$5,273 \$5,381 \$5,325 \$5,315 \$5,526	\$5,423 \$5,475 \$5,770 \$5,500 \$5,783	\$5,572 \$5,606 \$5,855 \$5,534 \$5,534	\$5,180
	20	80 80 80 80 80 80 80 80 80 80 80 80 80 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$0 \$5,141 \$4,977 \$4,969 \$4,997	\$4,980 \$5,013 \$5,068 \$5,064 \$5,084	\$5,134 \$5,271 \$5,215 \$5,326 \$5,326	\$5,346 \$5,546 \$5,428 \$5,406 \$5,455	\$5,643 \$5,884 \$6,137 \$5,463 \$5,341	\$5,031
	19	\$ 80 80 \$0 80 80	\$ 80 80 \$0 80 \$0 80	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 20 80 80 80 80 80 80 80 80 80 80 80 80 80	\$4,848 \$4,731 \$4,697 \$4,694	\$4,707 \$4,718 \$4,714 \$4,782 \$4,753	\$4,854 \$4,933 \$4,981 \$5,091 \$5,224	\$5,127 \$5,281 \$5,161 \$5,184 \$5,422	\$5,740 \$5,798 \$5,662 \$5,324 \$5,178	\$4,746
	18	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ 20 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$0 \$0 \$5 \$4,589	\$4,643 \$4,625 \$4,623 \$4,656 \$4,643	\$4,682 \$4,672 \$4,717 \$4,760 \$4,883	\$4,922 \$4,995 \$5,130 \$5,208 \$5,166	\$5,259 \$5,271 \$5,002 \$5,524 \$5,468	\$5,417 \$5,580 \$5,888 \$5,260 \$5,032	\$4,700
	17	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ 20 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$4,446 \$4,446	\$4,441 \$4,487 \$4,482 \$4,496 \$4,516	\$4,520 \$4,601 \$4,602 \$4,680 \$4,782	\$4,748 \$4,920 \$5,078 \$4,973 \$5,078	\$5,147 \$5,106 \$5,385 \$5,625 \$5,625	\$5,425 \$5,415 \$5,100 \$5,606 \$5,271	\$4,537
	16	\$ 8 8 8 8 8 8 8 8 8	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$4,443 \$4,399 \$4,375	\$4,383 \$4,411 \$4,420 \$4,438 \$4,496	\$4,498 \$4,556 \$4,593 \$4,589 \$4,677	\$4,786 \$4,993 \$4,862 \$4,940 \$5,038	\$5,016 \$5,151 \$5,264 \$5,385 \$5,294	\$5,343 \$5,326 \$5,553 \$5,596 \$5,625	\$4,468
	15	88888	88888	88888	\$0 \$4,050 \$4,227 \$4,220 \$4,227	\$4,271 \$4,291 \$4,329 \$4,378 \$4,398	\$4,412 \$4,450 \$4,502 \$4,586 \$4,666	\$4,796 \$4,796 \$4,801 \$4,794 \$4,960	\$4,944 \$5,265 \$5,191 \$5,028 \$5,090	\$5,102 \$5,146 \$5,622 \$5,408 \$4,508	\$4,328
	4	\$ 8 8 8 8 8 8 8 8 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$4,088 \$4,118 \$4,121 \$4,124 \$4,150	\$4,183 \$4,204 \$4,250 \$4,282 \$4,300	\$4,332 \$4,321 \$4,382 \$4,428 \$4,591	\$4,579 \$4,676 \$4,667 \$4,667 \$5,001	\$5,104 \$4,791 \$4,974 \$5,182 \$5,145	\$5,062 \$4,674 \$5,260 \$4,968 \$5,084	\$4,208
	13	8 8 8 8 8	80 80 80 80	\$0 \$0 \$0 \$0 \$4,045	\$3,935 \$3,937 \$3,947 \$3,976 \$4,022	\$4,080 \$4,114 \$4,164 \$4,192 \$4,197	\$4,266 \$4,274 \$4,335 \$4,368 \$4,436	\$4,455 \$4,423 \$4,547 \$4,691 \$4,703	\$5,027 \$4,834 \$5,116 \$4,835 \$5,057	\$4,918 \$5,237 \$5,117 \$5,375 \$0	\$4,051
	12	\$ 8 8 8 8 8 8 8 8 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 \$0 \$3,840 \$3,864	\$3,854 \$3,853 \$3,872 \$3,915 \$3,930	\$3,987 \$4,070 \$4,053 \$4,102 \$4,146	\$4,149 \$4,163 \$4,252 \$4,242 \$4,305	\$4,439 \$4,260 \$4,542 \$4,634 \$4,884	\$4,636 \$4,824 \$4,839 \$4,981 \$4,995	\$5,047 \$4,763 \$4,291 \$6,639 \$4,511	\$3,944
	Ξ	8 8 8 8 8	80 80 80 80	\$3,376 \$3,554 \$3,622 \$3,619	\$3,628 \$3,644 \$3,685 \$3,722 \$3,765	\$3,827 \$3,867 \$3,911 \$3,912 \$3,962	\$4,016 \$4,075 \$3,981 \$4,157 \$4,022	\$4,257 \$4,264 \$4,347 \$4,330 \$4,348	\$4,375 \$4,357 \$4,228 \$4,660 \$5,212	\$5,246 \$6,322 \$4,913 \$4,740 \$0	\$3,725
	10	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$ 80 80 80 \$0 80 80	\$3,605 \$3,559 \$3,558 \$3,570	\$3,583 \$3,602 \$3,639 \$3,682 \$3,728	\$3,777 \$3,805 \$3,841 \$3,848 \$3,892	\$3,896 \$4,016 \$3,894 \$3,970 \$3,890	\$4,104 \$4,159 \$4,143 \$4,212 \$4,212 \$4,180	\$4,286 \$4,101 \$4,310 \$4,802 \$5,904	\$4,542 \$4,507 \$4,968 \$5,429 \$5,565	\$3,644
	6	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$ 80 80 80 \$0 80 80	\$3,431 \$3,384 \$3,374 \$3,372 \$3,397	\$3,414 \$3,448 \$3,486 \$3,514 \$3,550	\$3,612 \$3,600 \$3,665 \$3,678 \$3,745	\$3,681 \$3,831 \$3,781 \$3,691 \$3,720	\$3,842 \$4,101 \$4,020 \$3,870 \$4,090	\$4,133 \$4,576 \$4,313 \$4,669 \$5,256	\$5,780 \$6,367 \$5,689 \$6,836 \$6,121	\$3,455
	œ	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$0 \$0 \$0 \$0 \$3,399	\$3,313 \$3,310 \$3,322 \$3,339 \$3,360	\$3,385 \$3,407 \$3,433 \$3,476 \$3,514	\$3,535 \$3,557 \$3,621 \$3,594 \$3,609	\$3,607 \$3,612 \$3,670 \$3,716 \$3,739	\$3,700 \$4,001 \$3,748 \$3,870 \$3,721	\$4,197 \$4,366 \$4,807 \$4,575 \$5,592	\$5,571 \$4,928 \$5,457 \$0 \$4,047	\$3,391
	7	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 \$0 \$0 \$2,521 \$3,020	\$3,019 \$3,025 \$3,044 \$3,068 \$3,093	\$3,129 \$3,137 \$3,183 \$3,207 \$3,259	\$3,340 \$3,371 \$3,465 \$3,460	\$3,507 \$3,327 \$3,522 \$3,585 \$3,646	\$3,723 \$3,708 \$3,751 \$3,801 \$4,363	\$4,704 \$5,053 \$4,856 \$5,045 \$5,445	\$5,696 \$6,737 \$6,012 \$5,249 \$0	\$3,097
	9	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 \$3,002 \$2,953 \$2,955	\$2,962 \$2,978 \$2,990 \$3,022 \$3,054	\$3,082 \$3,092 \$3,121 \$3,172 \$3,217	\$3,264 \$3,309 \$3,333 \$3,441 \$3,351	\$3,356 \$3,577 \$3,723 \$3,804 \$3,959	\$3,736 \$3,868 \$4,133 \$4,365 \$4,365	\$4,578 \$4,148 \$5,455 \$4,948 \$5,813	\$5,807 \$5,087 \$6,608 \$7,119 \$5,429	\$3,020
	S	\$ 8 8 8 8 8 8 8 8 8	\$0 \$2,816 \$2,718 \$2,718 \$2,722	\$2,733 \$2,753 \$2,779 \$2,802 \$2,830	\$2,860 \$2,889 \$2,911 \$2,963 \$3,050	\$3,102 \$3,092 \$3,107 \$3,102 \$3,088	\$3,309 \$3,883 \$3,805 \$4,125 \$3,682	\$4,163 \$4,120 \$3,784 \$4,330 \$4,245	\$3,866 \$4,157 \$6,649 \$4,618 \$7,600	\$7,849 \$7,849 \$0 \$0 \$7,475	\$2,773
	4	\$ 8 8 8 8 8 8 8 8 8	\$2,493 \$2,626 \$2,634 \$2,646 \$2,655	\$2,673 \$2,696 \$2,722 \$2,750 \$2,790	\$2,804 \$2,832 \$2,873 \$2,925 \$2,975	\$3,043 \$2,999 \$3,008 \$2,967 \$3,342	\$3,742 \$3,814 \$3,647 \$3,522 \$3,953	\$3,863 \$3,995 \$4,315 \$4,032 \$4,280	\$4,139 \$5,891 \$4,981 \$6,546 \$4,396	\$7,849 \$4,798 \$5,069 \$8,242 \$0	\$2,688
	8	\$0 \$0 \$0 \$2,456	\$2,421 \$2,433 \$2,447 \$2,459 \$2,473	\$2,490 \$2,512 \$2,539 \$2,571 \$2,612	\$2,628 \$2,662 \$2,695 \$2,758 \$2,809	\$2,786 \$2,783 \$2,761 \$3,003 \$3,378	\$3,525 \$3,272 \$3,289 \$3,843 \$4,374	\$3,587 \$4,104 \$4,645 \$4,221 \$4,968	\$4,412 \$3,554 \$4,047 \$4,756 \$5,637	\$4,974 \$5,429 \$5,429 \$4,047	\$2,477
	2	\$0 \$0 \$2,216 \$2,204	\$2,216 \$2,233 \$2,245 \$2,262 \$2,262 \$2,281	\$2,303 \$2,334 \$2,359 \$2,386 \$2,428	\$2,435 \$2,497 \$2,512 \$2,558 \$2,577	\$2,617 \$2,587 \$2,725 \$3,102 \$2,843	\$2,877 \$3,385 \$3,254 \$3,764 \$4,105	\$3,910 \$3,761 \$4,112 \$4,094 \$4,539	\$4,413 \$3,527 \$4,058 \$4,207 \$4,047	\$0 \$3,397 \$5,069 \$0 \$0	\$2,264
	-	\$0 \$0 \$1,953 \$1,959 \$1,975	\$1,995 \$2,005 \$2,019 \$2,040 \$2,063	\$2,083 \$2,112 \$2,130 \$2,131 \$2,189	\$2,202 \$2,207 \$2,233 \$2,269 \$2,255	\$2,253 \$2,343 \$2,688 \$2,668 \$2,405	\$2,707 \$2,922 \$3,480 \$3,356 \$3,669	\$3,962 \$3,302 \$3,418 \$3,555 \$3,613	\$3,376 \$4,047 \$4,974 \$0 \$0	\$4,897 \$0 \$0 \$0 \$0 \$0	\$2,018
	0	\$0 \$1,732 \$1,757 \$1,791 \$1,841	\$1,858 \$1,880 \$1,914 \$1,934 \$1,953	\$1,964 \$1,984 \$1,998 \$2,011 \$2,023	\$2,054 \$2,055 \$2,065 \$2,091 \$2,094	\$2,171 \$2,305 \$2,303 \$2,319 \$2,167	\$2,700 \$3,014 \$3,162 \$3,574 \$3,361	\$3,990 \$3,151 \$3,543 \$3,830 \$3,397	\$3,990 \$2,926 \$4,072 \$0 \$0	\$2,393 \$3,397 \$0 \$0 \$0	\$1,852
	Age	16 17 19 20	22 23 24 25 25 27	26 23 30 30	31 33 34 35	36 33 40	1 4 4 4 4 4 5 1 5 6 4 5 4 5 4 5 5 6 6 6 6 6 6 6 6 6 6 6	44 48 49 50	51 53 54 55	56 57 59 60+	Avg

Notes: Basic pay figures reflect the January, 2019, increase of 2.6'
Age is age nearest birthday as of the end of the fiscal year.

All DoD Average Monthly Active Duty Basic Pay by Active Years of Service and Age for FY 2018 Valuation

Avg	\$0 \$1,732 \$1,758 \$1,834 \$1,961	\$2,100 \$2,259 \$2,417 \$2,563 \$2,743	\$2,939 \$3,140 \$3,330 \$3,498 \$3,663	\$3,826 \$4,024 \$4,238 \$4,434 \$4,601	\$4,777 \$4,951 \$5,144 \$5,369 \$5,603	\$5,850 \$6,072 \$6,308 \$6,544 \$6,844	\$7,129 \$7,360 \$7,564 \$7,694 \$7,939	\$8,089 \$8,274 \$8,284 \$8,257 \$8,265	\$8,437 \$8,583 \$8,751 \$8,700 \$9,762	\$3,604
30+	\$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	80 80 80 80 80 80	\$ 8 8 8 8 8 8 8 8 8	80 80 80 80 80 80	\$0 \$9,521 \$8,555 \$8,847 \$9,247	\$9,379 \$10,624 \$11,244 \$11,555 \$12,010	\$12,232 \$12,060 \$12,650 \$12,847 \$12,237	\$10,771
59	8 8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8 8	8 8 8 8	8 8 8 8 8	\$7,119 \$7,848 \$7,866 \$7,954 \$8,192	\$10,689 \$11,050 \$10,896 \$10,280 \$10,058		\$9,241
78	88888	88888	88888	88888	88888	80 80 80 80 87,1119		\$10,801 \$10,564 \$10,359 \$10,174 \$10,065	\$10,416 \$10,117 \$10,220 \$9,566 \$10,868	\$9,161
27	\$0 \$0 \$0 \$0 \$0 \$0	\$0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 80 80 \$0 80 80	\$0 80 80 \$0 80 80	\$0 80 80 \$0 80 80	\$0 \$0 \$0 \$0 \$0 \$0 \$0		\$10,242 \$ \$10,051 \$ \$9,999 \$ \$10,139 \$		\$9,141
26	\$0 \$0 \$0 \$0 \$0 \$0	\$0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 80 80 \$0 80 80	\$0 80 80 \$0 80 80	8 8 8 8 8	\$0 \$0 \$8,721 \$7,425 \$7,474		\$9,778 \$ \$10,035 \$ \$10,100 \$9,673 \$		\$8,944
25	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 \$5,747 \$6,731 \$6,755 \$6,853		\$9,184 \$9,536 \$9,286 \$8,847 \$8,495		\$8,262
24	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80			\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$7,215 \$6,569 \$6,599 \$6,646 \$6,866		\$8,904 \$9,266 \$8,966 \$8,429 \$8,324	\$8,780 \$8,843 \$9,007 \$8,311 10,711 \$	\$8,063
23	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 80 80 \$0 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$0 \$0 \$0 \$0 \$8	\$6,081 \$6,053 \$6,057 \$6,244 \$8,248	\$8,905 \$8,635 \$8,517 \$8,335 \$8,455	\$8,247 \$8,133 \$8,149 \$8,268 \$8,212	\$8,716 \$8,067 \$8,201 \$8,056	\$7,371
22	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 80 80 \$0 80 80	\$ \$ \$ \$ \$ \$ \$ \$ \$	\$0 80 80 \$0 80 80	\$0 \$0 \$0 \$5,473 \$5,953	\$5,847 \$5,917 \$6,120 \$7,661 \$8,468		\$7,988 \$7,933 \$7,980 \$8,007 \$7,927	\$8,058 \$8,200 \$7,836 \$8,639 \$9,611	\$7,004
21	80 80 80 80	80 80 80 80	80 80 80 80	80 80 80 80	\$0 \$0 \$5,969 \$5,629 \$5,552	\$5,558 \$5,666 \$7,162 \$7,751 \$7,618	\$7,318 \$7,653 \$7,677 \$7,444 \$7,447	\$7,797 \$7,234 \$7,436 \$7,544 \$7,881	\$7,506 \$7,214 \$8,266 \$8,027 \$9,529	\$6,505
20	8 8 8 8 8	8 8 8 8	8 8 8 8	8 8 8 8 8	\$0 \$5,851 \$5,382 \$5,341 \$5,335	\$5,425 \$6,734 \$7,571 \$7,364 \$7,025	\$7,426 \$7,490 \$7,081 \$7,437 \$7,446	\$7,580 \$7,336 \$7,093 \$7,076 \$6,752	\$7,855 \$7,826 \$8,440 \$7,273 \$8,622	\$6,227
19	8 8 8 8	8 8 8 8	\$ \$ \$ \$ \$ \$ \$ \$	S S S S S	\$5,265 \$5,041 \$4,948 \$4,981 \$5,027	\$6,166 \$6,891 \$6,731 \$6,329 \$6,600	\$6,737 \$6,513 \$6,881 \$6,742 \$6,603	\$6,867 \$6,889 \$6,798 \$6,928	\$7,328 \$7,753 \$7,614 \$7,311 \$8,362	\$5,744
18	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 \$0 \$0 \$0 \$4,839	\$4,896 \$4,876 \$4,880 \$5,046 \$6,130	\$6,888 \$6,649 \$6,318 \$6,555 \$6,681	\$6,594 \$6,519 \$6,759 \$6,638 \$6,870	\$6,783 \$6,826 \$6,728 \$6,724	\$7,151 \$7,020 \$7,312 \$7,549 \$7,736	\$5,705
17	\$ 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 \$0 \$6,660 \$5,146 \$4,659	\$4,659 \$4,676 \$4,787 \$5,845 \$6,626	\$6,438 \$6,151 \$6,093 \$6,398 \$6,353	\$6,337 \$6,442 \$6,453 \$6,390 \$6,641	\$6,786 \$6,747 \$6,338 \$7,099 \$6,687	\$6,760 \$7,151 \$6,061 \$7,543 \$8,379	\$5,494
16	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 \$0 \$5,072 \$4,622 \$4,571	\$4,595 \$4,693 \$5,719 \$6,313 \$6,149	\$5,992 \$6,007 \$6,149 \$6,190 \$6,219	\$6,422 \$6,499 \$6,365 \$6,353 \$6,583	\$6,448 \$7,010 \$6,340 \$6,593 \$6,642	\$7,013 \$6,583 \$7,057 \$6,557 \$8,282	\$5,401
15	88888	88888	88888	\$0 \$4,806 \$4,394 \$4,381 \$4,419	\$4,531 \$5,422 \$6,108 \$5,936 \$5,705	\$5,801 \$5,968 \$5,946 \$5,967 \$5,989	\$6,068 \$6,123 \$6,036 \$6,367 \$6,250	\$6,321 \$6,838 \$6,727 \$6,839 \$6,682	\$6,448 \$7,045 \$6,872 \$6,676 \$8,138	\$5,193
41	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 20 80 80 80 80 80 80 80 80 80 80 80 80 80		\$4,312 \$4,262 \$4,265 \$4,283 \$4,383	\$5,225 \$5,902 \$5,635 \$5,535 \$5,532	\$5,687 \$5,644 \$5,718 \$5,785 \$5,884	\$6,003 \$5,776 \$6,086 \$6,015 \$6,529	\$6,555 \$6,427 \$6,691 \$6,617 \$6,285	\$6,582 \$7,086 \$7,193 \$7,260 \$7,653	\$5,015
13	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$		\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$4,051 \$4,039 \$4,065 \$4,173 \$5,116	\$5,852 \$5,521 \$5,298 \$5,487 \$5,558	\$5,461 \$5,612 \$5,692 \$5,589 \$5,872	\$5,618 \$5,781 \$5,748 \$6,067 \$6,298	\$6,304 \$6,177 \$6,824 \$6,290 \$6,279	\$6,744 \$5,918 \$7,147 \$6,202 \$8,730	\$4,874
12	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80	\$0 \$0 \$3,886 \$3,939	\$3,932 \$3,937 \$4,004 \$4,968 \$5,680	\$5,275 \$5,051 \$5,230 \$5,365 \$5,375	\$5,370 \$5,433 \$5,392 \$5,514 \$5,545	\$5,551 \$5,626 \$5,827 \$6,158 \$6,411	\$6,131 \$5,998 \$6,722 \$6,249 \$6,327	\$6,465 \$7,934 \$7,668 \$8,035 \$8,635	\$4,704
=	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8 8 8 8 8	\$0 \$3,376 \$3,554 \$3,679 \$3,672	\$3,691 \$3,769 \$4,751 \$5,393 \$5,057	\$4,811 \$4,933 \$5,225 \$5,147 \$5,117	\$5,098 \$5,122 \$5,179 \$5,243 \$5,111	\$5,218 \$5,216 \$5,444 \$5,407 \$5,365	\$5,590 \$5,725 \$6,336 \$6,709	\$6,206 \$7,346 \$7,287 \$7,125 \$7,717	\$4,479
10	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8 8 8 8 8	\$0 \$3,676 \$3,593 \$3,592 \$3,615	\$3,685 \$4,569 \$5,233 \$4,933 \$4,732	\$4,854 \$5,002 \$4,984 \$4,941 \$5,157	\$5,123 \$5,072 \$5,073 \$5,079 \$5,074	\$5,397 \$5,320 \$5,590 \$5,801 \$5,473	\$5,709 \$5,492 \$5,871 \$6,240 \$6,545	\$6,240 \$6,496 \$7,492 \$6,031 \$7,543	\$4,371
6	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8 8 8 8 8	\$3,431 \$3,405 \$3,396 \$3,403 \$3,472	\$4,186 \$4,830 \$4,607 \$4,418 \$4,499	\$4,705 \$4,648 \$4,753 \$4,834 \$4,731	\$4,800 \$4,842 \$4,818 \$4,687 \$4,923	\$4,816 \$5,115 \$5,013 \$5,060 \$5,388	\$5,308 \$6,186 \$5,767 \$6,727 \$6,209	\$6,616 \$7,400 \$7,082 \$6,836 \$6,489	\$4,106
∞	8 8 8 8	\$0 \$0 \$0 \$0 \$3,399	\$3,333 \$3,323 \$3,350 \$3,400 \$4,089	\$4,623 \$4,402 \$4,198 \$4,350 \$4,491	\$4,475 \$4,499 \$4,500 \$4,605 \$4,583	\$4,569 \$4,527 \$4,532 \$4,969 \$4,699	\$4,793 \$5,022 \$5,052 \$5,334 \$4,903	\$5,681 \$5,891 \$6,805 \$6,201 \$7,111	\$6,895 \$7,896 \$5,915 \$8,756 \$8,065	\$3,985
7		\$0 \$0 \$0 \$2,521 \$3,028	\$3,029 \$3,041 \$3,093 \$3,825 \$4,418	\$4,151 \$3,950 \$4,027 \$4,212 \$4,149	\$4,291 \$4,380 \$4,332 \$4,396 \$4,489	\$4,529 \$4,239 \$4,418 \$4,645 \$4,487	\$4,839 \$4,893 \$5,019 \$5,117 \$5,541	\$5,786 \$6,405 \$7,033 \$6,241 \$6,767	\$6,736 \$7,297 \$7,457 \$7,466 \$7,964	\$3,669
9	8 8 8 8	\$0 \$0 \$3,002 \$2,955 \$2,958	\$2,971 \$3,011 \$3,744 \$4,356 \$4,044	\$3,783 \$3,855 \$4,058 \$4,082 \$4,076	\$4,130 \$4,342 \$4,330 \$4,466 \$4,305	\$4,201 \$4,502 \$5,163 \$5,040 \$4,809	\$5,415 \$5,479 \$5,923 \$5,919 \$5,812	\$5,970 \$6,768 \$6,609 \$6,162 \$6,750	\$6,257 \$7,037 \$7,016 \$7,047 \$7,202	\$3,550
2	8 8 8 8	\$0 \$2,816 \$2,720 \$2,720 \$2,727	\$2,753 \$3,361 \$3,955 \$3,729 \$3,412	\$3,523 \$3,703 \$3,687 \$3,784 \$3,821	\$3,944 \$3,862 \$4,001 \$3,936 \$3,911	\$4,356 \$5,090 \$5,010 \$5,348 \$5,250	\$5,557 \$5,636 \$5,556 \$4,896 \$5,612	\$5,468 \$6,485 \$7,262 \$6,944 \$7,642	\$7,142 \$8,014 \$0 \$0 \$9,729	\$3,199
4	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$2,493 \$2,626 \$2,635 \$2,649 \$2,674	\$3,294 \$3,880 \$3,603 \$3,278 \$3,361	\$3,553 \$3,546 \$3,638 \$3,713 \$3,810	\$3,825 \$3,669 \$3,784 \$3,556 \$4,429	\$4,995 \$4,547 \$4,705 \$5,287 \$5,168	\$5,215 \$5,732 \$5,645 \$4,760 \$6,164	\$6,226 \$6,511 \$5,924 \$7,569 \$6,522	\$7,849 \$6,810 \$8,012 \$8,242 \$10,563	\$3,080
3	\$0 \$0 \$0 \$0 \$2,456	\$2,421 \$2,433 \$2,450 \$2,470 \$2,947	\$3,396 \$3,246 \$2,982 \$3,033 \$3,268	\$3,239 \$3,342 \$3,415 \$3,422 \$3,497	\$3,523 \$3,629 \$3,492 \$3,989 \$4,483	\$4,663 \$4,364 \$4,715 \$4,972 \$5,350	\$4,799 \$4,880 \$5,662 \$5,271 \$6,440	\$4,830 \$5,553 \$7,334 \$5,514 \$6,141	\$5,964 \$6,596 \$5,429 \$4,047 \$5,672	\$2,753
2	\$0 \$0 \$2,216 \$2,205	\$2,216 \$2,235 \$2,253 \$2,600 \$2,944	\$2,813 \$2,639 \$2,725 \$2,919 \$2,947	\$2,974 \$2,977 \$3,169 \$3,155 \$3,221	\$3,209 \$3,171 \$3,440 \$3,764 \$3,796	\$3,955 \$4,307 \$4,255 \$4,777 \$5,017	\$4,915 \$4,332 \$4,647 \$5,621 \$5,605	\$6,866 \$4,847 \$4,058 \$5,090 \$7,545	\$7,382 \$7,970 \$6,174 \$0 \$6,129	\$2,469
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Notes: Basic pay figures reflect the January, 2019, increase of 2.6%.
Age is age nearest birthday as of the end of the fiscal year.

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DoD Officers Selected Reserve Personnel by PEBD Years of Service and Age for FY 2018 Valuation

for of Service and Age PEBD Years Reserve Personnel by Enlisted Selected

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2018 Valuation Ŧ for PEBD Years of Service ģ Reserve Personnel Selected DoD

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DoD Officers Annualized Average Monthly Selected Reserve Personnel Basic Pay by PEBD Years of Service and Age for FY 2018 Valuation

Total	\$0 \$0 \$682 \$928	\$937 \$1,068 \$1,199 \$1,316 \$1,397	\$1,484 \$1,470 \$1,476 \$1,491 \$1,528	\$1,548 \$1,551 \$1,594 \$1,617 \$1,656	\$1,714 \$1,739 \$1,745 \$1,782 \$1,804	\$1,865 \$1,883 \$1,898 \$1,950 \$1,980	\$1,973 \$2,047 \$2,060 \$2,097 \$2,206	\$2,245 \$2,296 \$2,235 \$2,240 \$2,289	\$2,284 \$2,341 \$2,32 \$2,344 \$2,387	\$2,258 \$2,056 \$1,952	\$1,798
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40	88888	88888	88888	88888	88888	88888	88888	88888		\$2,997 \$3,685 \$3,209	\$2,813
æ	88888	88888	88888	88888	88888				\$1,784 \$2,293 \$2,751 \$2,910	53,164 53,874 53,868	\$2,641
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36	88888	88888	88888	88888	88888	88888	88888	\$0 \$2,500 \$2,293 \$2,565	\$2,459 \$2,526 \$2,784 \$2,866 \$3,132	\$4,463 \$3,332 \$3,119	\$2,558
8	88888	88888	88888	88888	88888	88888	88888	83,207 82,221 82,455 82,364	\$2,545 \$2,743 \$2,973 \$3,125	\$2,407 \$1,924 \$2,380	\$2,523
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33	88888	88888	88888	88888	88888	88888	888888	\$2,534 \$2,454 \$2,538 \$2,255 \$2,768	\$2,728 \$2,854 \$2,525 \$2,443 \$2,339	\$2,369 \$1,950 \$3,629	\$2,574
æ	88888	88888	88888	88888	88888	88888	\$0 \$0 \$2,839 \$2,615	\$2,341 \$2,626 \$2,434 \$2,940 \$2,722	\$2,428 \$2,612 \$2,687 \$2,690 \$3,564	\$2,811 \$2,645	\$2,597
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53	88888	88888	88888	88888	88888	88888	\$2,386 \$2,325 \$2,382 \$2,382 \$2,547	\$2,762 \$2,768 \$2,615 \$2,551 \$2,519	\$2,424 \$2,660 \$2,221 \$2,334 \$2,183	\$2,497 \$2,016 \$3,277	\$2,504
88	88888	88888	88888	88888	88888	\$278 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$2,163 \$2,328 \$2,331 \$2,387 \$2,494	\$2,751 \$2,614 \$2,275 \$2,365 \$2,159	\$2,145 \$2,389 \$2,228 \$2,507 \$2,409	\$2,578 \$3,187 \$2,236	\$2,403
23	8 8 8 8 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	80 80 80 80 80 80 80 80 80 80 80 80 80 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 \$0 \$1,965 \$2,205	\$2,187 \$2,290 \$2,275 \$2,458 \$2,590	\$2,380 \$2,369 \$2,360 \$2,186	\$2,373 \$2,184 \$2,248 \$2,213 \$2,742	\$2,116 \$1,706 \$2,716	\$2,348
56	88888	88888	88888	88888	88888	\$0 \$2,114 \$2,140 \$2,271	\$2,278 \$2,248 \$2,363 \$2,502 \$2,464	\$2,402 \$2,125 \$2,006 \$2,260 \$2,248	\$2,100 \$2,221 \$2,117 \$2,289 \$3,040	\$2,951 \$2,125 \$2,593	\$2,309
25	88888	88888	88888	88888	88888	\$0 \$2,406 \$2,141 \$2,225 \$2,215	\$2,250 \$2,414 \$2,503 \$2,312 \$2,362	\$2,131 \$2,194 \$2,276 \$2,216 \$2,008	\$2,278 \$2,274 \$2,239 \$2,372 \$2,382	\$2,191 \$2,472 \$2,348	\$2,296
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21	88888	88888	88888	88888	\$0 \$2,055 \$2,037 \$1,912	\$2,065 \$2,045 \$2,171 \$2,246 \$2,246	\$2,172 \$2,145 \$1,991 \$1,777 \$2,052	\$1,962 \$2,021 \$1,996 \$1,744 \$1,838	\$2,239 \$1,861 \$1,772 \$1,837 \$1,950	\$2,311 \$1,849 \$2,164	\$2,060
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18	88888	88888	88888	\$2,133	\$1,862 \$1,894 \$1,860 \$1,930 \$2,038	\$2,103 \$2,077 \$2,063 \$2,058 \$1,958	\$1,864 \$1,719 \$1,760 \$1,680 \$1,898	\$1,798 \$1,762 \$1,730 \$1,856 \$1,766	\$1,834 \$1,792 \$1,957 \$1,813 \$2,042	\$2,137 \$1,776 \$2,032	\$1,946
17	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	\$0 \$0 \$1,769 \$1,842	\$1,879 \$1,834 \$1,852 \$1,920 \$2,008	\$2,008 \$1,987 \$2,029 \$1,885 \$1,794	\$1,652 \$1,835 \$1,612 \$1,867 \$1,768	\$1,771 \$1,789 \$1,925 \$1,723 \$1,797	\$1,395 \$1,939 \$2,227 \$1,878 \$2,051	\$1,673 \$1,652 \$2,110	\$1,892
16	8 8 8 8 8	8 8 8 8 8	8 8 8 8 8	\$0 \$1,729 \$1,840 \$1,905	\$1,810 \$1,861 \$1,954 \$1,982	\$1,899 \$1,797 \$1,790 \$1,648	S1,647 S1,592 S1,508 S1,681 S1,731	\$1,736 \$1,785 \$1,675 \$1,665 \$2,021	\$1,868 \$2,158 \$1,804 \$2,162 \$1,834	\$1,978 \$1,223 \$1,792	\$1,866
15	88888	88888	88888	\$1,777 \$1,844 \$1,808 \$1,837	\$1,864 \$1,947 \$1,944 \$1,842	\$1,860 \$1,851 \$1,634 \$1,736 \$1,563	\$1,536 \$1,611 \$1,590 \$1,604 \$1,607	\$1,643 \$1,651 \$1,664 \$1,542 \$1,663	\$1,940 \$1,766 \$1,627 \$1,705 \$1,748	\$1,776 \$2,052 \$1,358	\$1,831
14	88888	88888	88888	\$1,901 \$1,827 \$1,758 \$1,791 \$1,808	\$1,927 \$1,896 \$1,882 \$1,780 \$1,796	\$1,785 \$1,597 \$1,487 \$1,704 \$1,566	\$1,613 \$1,477 \$1,526 \$1,713 \$1,515	\$1,816 \$1,767 \$1,641 \$1,615 \$1,773	\$1,601 \$1,587 \$1,588 \$1,519 \$1,519	\$1,524 \$1,478 \$1,586	\$1,800
13	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8	\$0 \$0 \$0 \$0 \$0 \$0	\$1,824 \$1,803 \$1,732 \$1,763 \$1,808	\$1,844 \$1,887 \$1,843 \$1,738 \$1,738	\$1,669 \$1,400 \$1,645 \$1,566 \$1,527	\$1,349 \$1,509 \$1,555 \$1,406 \$1,615	\$1,771 \$1,614 \$1,462 \$1,546 \$1,932	\$1,799 \$1,516 \$1,902 \$1,382 \$1,933	\$1,519 \$1,797 \$1,398	\$1,759
12	80 80 80 80	8 8 8 8 8		\$1,824 \$1,843 \$1,831 \$1,773 \$1,838	\$1,831 \$1,739 \$1,73 \$1,650 \$1,534	\$1,576 \$1,557 \$1,417 \$1,386 \$1,417	\$1,437 \$1,579 \$1,395 \$1,606 \$1,524	\$1,715 \$1,599 \$1,547 \$1,860 \$1,422	\$1,818 \$2,018 \$1,597 \$1,197	\$2,071 \$1,411 \$1,726	\$1,746
Ξ	88888	88888	\$0 \$1,621 \$1,587 \$1,817	\$1,759 \$1,774 \$1,706 \$1,726 \$1,641	\$1,692 \$1,632 \$1,592 \$1,428 \$1,347	\$1,445 \$1,519 \$1,453 \$1,392 \$1,481	\$1,379 \$1,324 \$1,501 \$1,270 \$1,157	\$1,384 \$1,536 \$1,913 \$1,681 \$1,392	\$1,708 \$864 \$1,696 \$1,653 \$1,525	\$1,342 \$0 \$1,391	\$1,650
10	88888		\$0 \$1,726 \$1,630 \$1,776	\$1,795 \$1,618 \$1,650 \$1,569	\$1,538 \$1,455 \$1,419 \$1,411	\$1,257 \$1,435 \$1,595 \$1,396 \$1,396	\$1,298 \$1,540 \$1,409 \$1,347 \$1,345	\$1,186 \$1,865 \$1,755 \$1,430 \$1,148	\$1,071 \$1,595 \$1,595 \$2,066 \$1,358	\$1,548 \$1,387 \$1,320	\$1,600
6		8 8 8 8		\$1,487 \$1,526 \$1,588 \$1,549	\$1,425 \$1,407 \$1,321 \$1,401 \$1,426	\$1,421 \$1,393 \$1,252 \$1,314 \$1,189	\$1,258 \$1,051 \$1,232 \$1,142 \$1,314	\$1,315 \$1,013 \$1,469 \$1,103 \$1,279	\$1,216 \$1,114 \$1,762 \$1,223 \$1,437	\$1,283 \$1,258 \$1,205	\$1,478
∞			\$1,583 \$1,601 \$1,697 \$1,628 \$1,510	\$1,507 \$1,510 \$1,506 \$1,530 \$1,530	\$1,401 \$1,382 \$1,185 \$1,221 \$1,120	\$1,214 \$1,408 \$1,168 \$1,23 \$1,123	\$1,181 \$1,349 \$1,240 \$1,354 \$1,371	\$1,290 \$1,096 \$1,352 \$1,276	\$1,284 \$1,730 \$1,273 \$1,337 \$1,221	\$1,103 \$1,232 \$1,252	\$1,473
7		\$0 \$0 \$1,656 \$1,498	\$1,632 \$1,597 \$1,487 \$1,448 \$1,444	\$1,491 \$1,505 \$1,352 \$1,333	\$1,217 \$1,189 \$1,229 \$1,091 \$1,224	\$1,187 \$1,148 \$1,210 \$1,131 \$1,205	\$1,181 \$1,369 \$1,260 \$929 \$1,366	\$1,126 \$1,334 \$1,065 \$1,619 \$1,619	\$1,401 \$1,163 \$1,469 \$1,251 \$1,125	\$1,125 \$1,144 \$1,236	\$1,417
9		\$0 \$1,573 \$1,573 \$1,452 \$1,527	\$1,532 \$1,591 \$1,445 \$1,413 \$1,565	51,480 51,430 1 51,403 7 51,229 51,278	\$1,198 \$1,071 \$1,097 \$1,201 \$1,204	\$1,173 \$1,268 \$1,169 \$1,115 \$1,115	51,358 51,065 51,067 51,080 1 51,198	\$1,269 1 \$1,125 7 \$1,203 5 \$1,224 1 \$1,780	\$1,115 \$1,451 \$1,156 \$1,156 \$1,173	\$1,124 5 \$1,046 8 \$1,225	5 \$1,406
8		\$1,361 \$1,275 \$1,409 \$1,436	\$1,521 \$1,341 \$1,402 \$1,540	\$1,539 \$1,365 \$1,231 \$1,099	\$989 \$1,126 \$1,090 \$1,169 \$1,169	\$1,267 \$942 \$1,203 \$1,169 \$983	\$1,111 \$1,025 \$935 \$1,002 \$1,002	\$1,184 \$1,001 \$1,007 \$993 \$1,181	\$1,024 \$1,024 \$1,026 \$1,092	\$1,026 \$1,043	\$1,346
4	88888	S is si	\$1,507 \$1,401 \$1,520 \$1,436 \$1,390	\$1,285 \$1,246 \$1,154 \$1,157 \$977	\$1,104 \$1,110 \$1,162 \$1,168 \$1,208	\$1,264 \$1,056 \$1,207 \$1,173 \$970	\$1,162 \$1,078 \$1,036 \$833 \$1,270	\$1,262 \$1,076 \$1,076 \$1,024	\$1,164 \$1,114 \$993 \$1,026 \$1,158	\$1,092 \$1,026 \$1,039	\$1,343
6	88888	\$967 \$1,149 \$1,286 \$1,376 \$1,475	\$ \$1,462 \$ \$1,584 \$ \$1,472 \$ \$1,477	\$1,246 \$1,077 \$1,069 \$1,069	\$1,141 \$1,016 \$1,012 \$1,160 \$1,023	8932 8 51,140 8 51,098 4 51,230 5 51,205	\$1,232 \$1,154 \$772 \$1,045	\$ \$1,048 4 \$1,125 4 \$0 1 \$1,309 8 \$1,078	\$1,013 \$1,078 \$1,012 \$1,012 \$1,012	s 80 80 80 81,045	\$1,328
- 13		\$ \$962 5 \$999 1 \$1,141 0 \$1,229	S1,254 S1,246 S1,246 S1,146	\$ \$1,132 8 \$1,052 7 \$932 1 \$972 0 \$1,018	\$1,007 \$1,007 \$1,007 \$1,082	\$ \$1,024 9 \$1,013 1 \$968 5 \$1,084 7 \$936	\$ \$1,037 \$ \$983 0 \$992 2 \$1,021 2 \$1,166	5 \$1,228 5 \$954 8 \$1,134 0 \$1,011	\$948 \$948 \$945 \$945	5948 1 S0	8 \$1,119
_	8888	\$912 \$957 \$1,045 \$1,091 \$1,140	\$1,168 \$1,106 \$1,098 \$1,003 \$1,003	88.88 88.60 88.61	SS	\$1,108 7 \$799 4 \$911 8 \$816	\$845 \$844 \$1,022 \$1,022		SS 19 SS 19 SS 19 SS 19 SS 19	SS 19 SS 29 SS 29	\$993
J	8888813	\$957 \$1,045 \$1,090 \$1,128 \$1,156	\$1,096 \$1,096 \$1,024 \$992 \$915	\$8.44 \$8.27 \$8.27 \$9.04	\$88 \$86 \$89 \$827 \$1,070	88 88 88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$818 \$854 \$959 \$1,029 \$838	88 88 88 87 88 88 88 88 88 88 88 88 88 8	88 19 87 87 88 89 70 88	888	80.70
										_	

Notes: Basic pay figures reflected, harmar, 2010 increase of 20%,
Age inger navered briefully an of the red of the fixed year.
Age inger navered briefully an of the red of the fixed year.
Communication little (by Norange Points Per Ver first skip layed in Approxit II, with assumed 13-point deduction for average points cannel per
Communication little (by Norange Points Per Ver first skip layed in Approxit II, with assumed 13-point deduction for average points cannel per

DoD Enlisted Annualized Average Monthly Selected Reserve Personnel Basic Pay by PEBD Years of Service and Age for FY 2018 Valuation

Total	\$526 \$667 \$578 \$578	\$594 \$599 \$605 \$614 \$631	\$651 \$680 \$704 \$726	\$763 \$788 \$813 \$839 \$858	\$875 \$894 \$902 \$917 \$936	\$963 \$980 \$1,014 \$1,024 \$1,046	\$1,066 \$1,091 \$1,124 \$1,127 \$1,155	\$1,167 \$1,167 \$1,203 \$1,218 \$1,260	\$1,294 \$1,300 \$1,284 \$1,319 \$1,500	\$1,068 \$950 \$1,225	87.8
4+	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$ 80 \$ 80 \$ 80	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80 8	2 2 2 2 3	88888	S1,696 S1,403 S3,198	\$637 \$1,372 \$0	\$2,293
40	88888	88888	88888	88888	88888	88888	88888	88888		S1,502 S0 3	81,776
33	88888	88888	88888	8888	88888	88888	88888	88888	S1,851 S1,580 S1,580 S1,540 S1,540 S1,386	S1,493 S0 S0	\$1,528
28	88888	88888	88888	88888	88888	88888	88888	88888	\$1,622 \$ \$1,539 \$ \$1,508 \$ \$1,438 \$ \$1,603 \$	S 151,131 S 98	\$1,574 \$
37	8 8 8 8 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2	8 8 8 8 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2		8 8 8 8 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2		S1,492 S S1,495 S S1,458 S S1,433 S S1,402 S	\$1,281 \$ \$0 \$0	\$1,509 \$
36	88888	88888	88888	88888	88888	88888	88888		S1,516 S S1,486 S S1,328 S S1,338 S S1,437 S	S 98 S	S1,480 S
33	88888	88888	88888	88888	88888	88888	88888		S1,552 S S1,417 S S1,474 S S1,474 S	8988 8978 808	\$1,460 \$
×	88888	88888	88888	88888	88888	88888	88888		Si,411 S Si,407 S Si,434 S Si,287 S Si,361 S	80,066 80 80	S1,436 S
33	88888	88888	88888	88888	88888	88888	88888	S1,423 S S1,412 S S1,407 S S1,390 S S1,391 S	S1,463 S S1,425 S S1,411 S S1,370 S	80 S 8955 8967	S1,409 S
33	88888		88888			88888		S1,496 S1,382 S1,420 S1,430 S1	S1,365 S S1,367 S S1,400 S S1,336 S	SS 88 89 80 80 80 80 80 80 80 80 80 80 80 80 80	S1,432 S
31	88888	88888	88888	88888	88888	88888	\$0 \$1,333 \$1,477 \$1,438	\$1,380 \$1,451 \$1,355 \$1,386 \$1,386 \$1,479	\$1,375 \$1,416 \$1,273 \$1,220 \$1,204 \$1,204	28 8 28 8 38 8	S1,411 S
30	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$ 80 \$ 80 \$ 80	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$0 \$1,351 \$1,491 \$1,427 \$1,410	S1,376 S1,277 S1,326 S1,312 S1,417	S1,408 S1,337 S1,362 S1,237 S1,233	3,372 S0 S0	\$1,393
59	88888	88888	88888	88888	88888	88888	SI,464 SI,389 SI,389 SI,389	S1,335 S1,236 S1,351 S1,341	\$1,286 \$1,210 \$1,300 \$1,162	8 8 8	\$1,357
82	88888	88888	88888	88888	88888	8 8 8 8 8	S1,479 S1,379 S1,363 S1,363 S1,364	S1,245 S1,301 S1,220 S1,288	S1,266 S1,195 S1,195 S1,184 S1,018	3989 3989 30	\$1,344
23	88888	88888	88888	88888	88888		S1,374 S1,358 S1,337 S1,305 S1,273	S1235 S1207 S1290 S1211 S1266	S1,288 S1,276 S1,245 S1,137 S1,190	S1,079 5 S1,357 S0	\$1,319
56	88888	88888	88888	88888	88888		S1,274 S1,320 S1,317 S1,256 S1,274	\$1,215 \$1,207 \$1,270 \$1,218	\$1,295 \$1,223 \$1,240 \$1,202	S1,350 S0 S0	\$1,316
25	88888		88888			81,229 81,229 81,329 81,199	\$1,230 \$1,230 \$1,253 \$1,185 \$1,183		S1,150 S1,070 S1,149 S1,135 S1,137	\$1,063 \$950 \$0	\$1,219
24	88888	88888	88888	88888	88888	\$1,287 \$1,306 \$1,272 \$1,234 \$1,205	\$1,168 \$1,165 \$1,170 \$1,157 \$1,037	\$1,188 \$1,152 \$1,167 \$1,131	\$1,117 \$1,121 \$1,135 \$1,108 \$1,044	\$1,232 \$848 \$0	\$1,197
23	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	80 80 80 80 80	\$0 \$0 \$0 \$1,208	\$1,222 \$1,215 \$1,202 \$1,175 \$1,166	\$1,164 \$1,167 \$1,171 \$1,093	\$1,181 \$1,052 \$1,088 \$1,161 \$1,077	Si, 134 Si, 113 Si, 174 S987 S1,008	\$838 \$0 \$888	\$1,170
22	88888	88888	88888	88888	80 80 81,260 81,201	\$1,185 \$1,151 \$1,141 \$1,099	\$1,084 \$1,102 \$1,034 \$1,067 \$1,062	\$1,137 \$1,010 \$1,058 \$1,064 \$1,040	\$987 \$1,157 \$1,039 \$1,023 \$926	\$1,024 \$817 \$0	\$1,124
21	88888	88888	88888	88888	80 81,189 81,118 51,118	\$1,067 \$1,077 \$1,101 \$1,034	\$1,032 \$1,015 \$1,022 \$1,026 \$1,015	\$1,001 \$944 \$1,047 \$993 \$1,050	\$1,015 \$981 \$987 \$971 \$973	\$853 \$1,048 \$1,079	\$1,065
8	88888	88888	88888	88888	\$0 \$1,162 \$1,076 \$1,061 \$1,042	\$1,054 \$1,022 \$1,024 \$986 \$1,019	\$981 \$1,014 \$981 \$1,015	\$9.59 \$1,010 \$9.22 \$9.34	\$1,032 \$1,063 \$938 \$1,005 \$915	\$1,012 \$823 \$0	\$1,032
19	20 20 20 20 20 20 20 20 20 20 20 20 20 2	80 80 80 80 80 80 80 80 80 80 80 80 80 8	8 8 8 8 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$1,069 \$1,046 \$1,007 \$1,000 \$1,000	\$999 \$1,011 \$971 \$998	\$952 \$976 \$973 \$947	5984 5953 5979 5898	\$990 \$912 \$962 \$864	\$914 \$949 \$1,293	8008
8	88888	88888	88888	8 8 8 8 8 8 8 8 8 8 9 9 9 9 9 9 9 9 9 9	\$1,021 \$998 \$972 \$980 \$954	\$988 \$974 \$933 \$943	\$945 \$945 \$960 \$914 \$930	\$895 \$997 \$935 \$940	\$928 \$936 \$834 \$921 \$820	\$809 \$1,085 \$0	8079
17	88888	88888	88888	\$0 \$1,007 \$997	88 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$9.45 \$9.22 \$9.43 \$9.53	\$9.26 \$9.24 \$9.24 \$9.21	\$9 48 \$8 20 \$9 20 \$9 00	\$8.25 \$9.05 \$9.05 \$9.05	\$1,473 \$0 \$0	85 08
91	88888	88888	88888	\$0 \$1,014 \$972	\$957 \$931 \$974 \$963 \$962	\$970 \$946 \$982 \$987 \$921	\$949 \$914 \$894 \$876	\$924 \$924 \$835 \$831 \$884	\$860 \$1,021 \$727 \$1,085	888	28957
15	88888	88888	88888	\$0 \$990 \$982 \$937	\$948 \$923 \$924 \$894	8924 8942 8977 8908	\$908 \$877 \$910 \$873	\$868 \$821 \$881 \$810	\$864 \$813 \$703 \$1,007	888	\$939
4	88888	88888	88888	39.42 39.63 39.63 39.63 39.44	\$909 \$916 \$927 \$918	\$9.16 \$9.32 \$9.61 \$9.31 \$9.46	\$9.29 \$9.27 \$9.65 \$9.11 \$8.36	\$7.52 \$9.16 \$7.88 \$1.11 \$9.44	\$1,028 \$784 \$968 \$868 \$0	888	39.38
13	88888	88888	88888	88 88 88 88 88 88 87 88 88	\$9.06 \$8.22 \$8.77 \$9.06	88 88 88 88 88 88 88 88 88 88 88 88 88	\$8.50 \$8.80 \$8.80 \$8.80	\$2 88 88 88 88 88 88 88 88 88 88 88 88 88	\$8.30 \$1,2.26 \$8.68 \$5.92 \$0	888	\$893
12	8 8 8 8 8	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$893 \$893	\$889 \$871 \$889 \$870 \$887	\$876 \$897 \$871 \$862 \$869	\$866 \$822 \$894 \$863 \$853	\$882 \$840 \$816 \$895	\$874 \$753 \$974 \$947 \$1,125	\$732 \$868 \$0 \$0 \$0	\$0 \$0 \$0	\$880
Ξ	88888	88888	SO S799 S834 S834	\$83.9 \$82.1 \$86.5	\$83.1 \$82.0 \$82.0 \$83.0	\$826 \$829 \$837 \$806 \$821	\$820 \$778 \$832 \$843 \$869	\$899 \$811 \$995 \$1,557 \$985	803.4 80 80 878.2	888	\$839
10	88888	88888	88 38 38 38 38 38 38 38 38 38 38 38 38 3	\$8.39 \$8.12 \$8.41 \$8.61 \$8.36	\$8 88 88 88 88 88 88 88 88 88 88 88 88 8	\$864 \$827 \$793 \$804 \$832	\$8.10 \$8.24 \$8.00 \$8.40 \$7.41	\$9.70 \$8.69 \$1,097 \$8.25 \$0	87797 8722 80 80	888	\$831
6	88888						•	**			28802
∞	88888	8888778	\$796 \$770 \$770 \$770	\$766 \$758 \$760 \$747	\$776 \$770 \$770 \$768	\$798 \$771 \$774 \$745	\$753 \$781 \$936 \$762 \$892	\$1,027 \$87.1 \$82.0 \$0	88888	888	\$77.5
7	88888										\$7.10
9						8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8					8998
	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$										8628
4	88888										\$604
3						\$5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8					\$613
2	88888										\$803
_						\$47.5 \$62.4 \$53.2 \$23.3					8258
0	822 6 8884 8609 8544	\$564 \$557 \$584 \$601	\$565 \$587 \$540 \$5604	\$463 \$403 \$428 \$488	\$488 \$405 \$334 \$377 \$424	\$386 \$395 \$600 \$573 \$0	\$548 \$617 \$0 \$0	\$659 8559 8	88888	\$512 80 80	\$888
\gc	92828	= 21 21 21 21	86888	= 0:0 x 2	8 2 2 2 2	= 0 0 3 5	85888	= 0 2 X X	8 2 2 2 3	= a å	-

vise: Basis pay figures rether the January, 2019, increase of 2.0%.

Age in gen measte that fire for each of the factor fired fired fired for everage on the Constructed origins the Advances for the Performance of the Advances for the Adva

All DoD Annualized Average Monthly Selected Reserve Personnel Basic Pay by PEBD Years of Service and Age for FY 2018 Valuation

Total	\$528 \$667 \$578 \$578	\$5.50 \$6.25 \$6.70 \$6.70 \$6.70	\$716 \$738 \$783 \$816 \$846	\$885 \$919 \$964 \$1,005 \$1,041	\$1,082 \$1,120 \$1,139 \$1,172 \$1,196	\$1,250 \$1,281 \$1,317 \$1,356 \$1,387	\$1,393 \$1,443 \$1,479 \$1,501 \$1,556	\$1,570 \$1,587 \$1,564 \$1,572 \$1,613	\$1,614 \$1,657 \$1,634 \$1,695 \$1,867	\$1,963 \$1,892 \$1,937	\$921
4+	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	8 8 8 8 8	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	20 20 20 20 20 20 20 20 20 20 20 20 20 2	8 8 8 8 8	\$0 \$0 \$1,812 \$1,872	S2,764 S1,896 S3,381	\$2,539
40	88888	88888	88888	88888	88888	88888	88888	88888	S1,687 S1,998 S2,031	\$2,250 \$3,685 \$3,209	\$2,067
8	88888	88888	88888	88888	88888	88888	88888	88888	\$1,823 \$1,720 \$1,844 \$1,853	\$2,886 \$3,874 \$3,868	\$1,813
88	88888	88888	88888	88888	88888	88888	88888	8 8 8 8 8 8 8 8 8 8	\$1,928 \$1,837 \$1,749 \$1,825 \$2,534	\$2,772 \$3,481 \$2,407	\$1,898
37	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 \$0 \$2,104 \$1,878	\$1,784 \$1,760 \$1,731 \$1,824 \$2,248	\$2,457 \$2,181 \$2,579	\$1,835
36	88888	88888	88888	88888	88888	88888	88888	\$0 \$0 \$2,173 \$1,749	\$1,771 \$1,843 \$1,844 \$1,958	\$4,463 \$3,332 \$2,452	\$1,814
32	88888	88888	88888	88888	88888	88888	88888	\$0 \$2,291 \$1,692 \$1,751 \$1,781	\$1,860 \$1,968 \$2,030 \$1,827 \$2,089	\$2,052 \$1,687 \$2,380	\$1,822
×	88888	88888	88888	88888	88888	88888	88888	\$1,656 \$1,875 \$1,637 \$1,718 \$1,807	\$1,879 \$1,974 \$1,863 \$1,660	\$2,2 19 \$0 \$1,853	\$1,785
33	88888	88888	88888	88888	88888	88888	SS	\$1,853 \$1,778 \$1,778 \$1,663 \$1,985	\$2,004 \$2,001 \$1,868 \$1,748 \$1,683	\$2,369 \$1,702 \$2,869	\$1,846
33	88888	88888	88888	88888	88888	88888	80 80 82,079 81,957	\$1,780 \$1,804 \$1,743 \$1,960 \$2,003	\$1,698 \$1,745 \$1,790 \$1,903 \$1,968	\$802 \$2,461 \$2,645	\$1,849
31	88888	88888	88888	88888	88888	88888	\$0 \$0 \$1,617 \$1,885 \$1,753	\$1,779 \$1,801 \$1,976 \$1,988 \$1,916	\$1,631 \$1,814 \$1,659 \$1,559	\$2,758 \$2,719 \$2,049	\$1,826
30	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	80 80 80 80 80 80 80 80 80 80 80 80 80 8	\$0 80 80 80 80 80 80 80 80 80 80 80 80 80	\$0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$1,665 \$1,886 \$1,733 \$1,793	\$1,869 \$2,168 \$1,893 \$1,821	\$1,854 \$1,862 \$1,740 \$1,656 \$1,666	\$2,218 \$2,043 \$2,347	\$1,853
29	88888	88888	88888	88888	88888	88888	\$1,882 \$1,805 \$1,775 \$1,652 \$1,815	\$2,143 \$2,181 \$1,964 \$1,869 \$1,819	\$1,746 \$1,871 \$1,675 \$1,661	\$2,267 \$2,016 \$3,277	\$1,856
28	88888	88888	88888	88888	88888	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$1,741 \$1,713 \$1,671 \$1,736 \$2,025	\$2,125 \$1,977 \$1,704 \$1,765 \$1,630	\$1,586 \$1,726 \$1,631 \$1,930 \$1,888	\$2,335 \$2,637 \$2,236	\$1,798
27	88888	88888	88888	88888	88888	\$0 \$0 \$1,610 \$1,716	\$1,632 \$1,678 \$1,658 \$1,963 \$2,029	\$1,786 \$1,717 \$1,792 \$1,609 \$1,670	\$1,625 \$1,596 \$1,621 \$1,635 \$1,762	\$1,597 \$1,636 \$2,716	\$1,748
26	88888	88888	88888	88888	88888	\$0 \$1,662 \$1,722	\$1,636 \$1,651 \$1,811 \$2,014 \$1,893	\$1,755 \$1,624 \$1,575 \$1,595 \$1,770	\$1,548 \$1,586 \$1,443 \$1,565 \$1,961	\$2,470 \$2,125 \$2,593	\$1,740
25	88888	88888	88888	88888	88888	\$1,673 \$1,615 \$1,533 \$1,525	\$1,582 \$1,842 \$1,973 \$1,771 \$1,688	\$1,569 \$1,577 \$1,555 \$1,482 \$1,372	\$1,582 \$1,436 \$1,455 \$1,581 \$1,676	\$1,815 \$1,330 \$2,348	\$1,646
24	88888			88888		\$1,632 \$1,600 \$1,523 \$1,512 \$1,547	\$1,743 \$1,871 \$1,744 \$1,632 \$1,449	\$1,555 \$1,492 \$1,463 \$1,511 \$1,511	\$1,515 \$1,369 \$1,351 \$1,341 \$1,279	\$1,527 \$1,929 \$2,286	\$1,589
23	20 20 20 20 20 20 20 20 20 20 20 20 20 2	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8	8 8 8 8 8	\$0 \$0 \$0 \$1,459	\$1,490 \$1,435 \$1,406 \$1,473 \$1,710	\$1,813 \$1,715 \$1,545 \$1,526	\$1,485 \$1,423 \$1,342 \$1,364 \$1,452	\$1,390 \$1,277 \$1,371 \$1,215 \$1,473	\$1,813 \$1,957 \$2,113	\$1,517
22	88888	88888	88888	88888	\$0 \$1,580 \$1,425	\$1,392 \$1,358 \$1,393 \$1,662 \$1,809	\$1,577 \$1,591 \$1,497 \$1,485 \$1,485	\$1,450 \$1,291 \$1,337 \$1,332	\$1,234 \$1,460 \$1,209 \$1,380 \$1,316	\$1,594 \$1,519 \$2,051	\$1,471
21	88888	88888	88888	88888	\$0 \$1,500 \$1,364 \$1,296	\$1,278 \$1,304 \$1,525 \$1,645 \$1,461	\$1,480 \$1,466 \$1,379 \$1,281 \$1,303	\$1,301 \$1,170 \$1,263 \$1,181 \$1,256	\$1,276 \$1,169 \$1,171 \$1,210 \$1,424	\$1,894 \$1,671 \$2,023	\$1,367
8	88888	88888	88888	88888	\$0 \$1,401 \$1,292 \$1,255 \$1,245	\$1,262 \$1,476 \$1,614 \$1,496 \$1,410	\$1,340 \$1,291 \$1,318 \$1,235 \$1,285	\$1,131 \$1,272 \$1,230 \$1,144 \$1,088	\$1,293 \$1,378 \$1,190 \$1,467 \$1,634	\$1,392 \$1,500 \$1,917	\$1,322
19	8 8 8 8	\$0 8 8 0 8 8 0 8 0 8 0 8 0 8 0 8 0 8 0 8	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$1,324 \$1,241 \$1,176 \$1,174 \$1,214	\$1,418 \$1,566 \$1,496 \$1,379 \$1,404	\$1,299 \$1,218 \$1,193 \$1,171 \$1,135	\$1,180 \$1,185 \$1,187 \$1,192 \$1,109	\$1,172 \$1,231 \$1,323 \$1,330 \$1,380	\$1,545 \$1,757 \$1,843	\$1,272
18	88888	88888	88888	S1.30 S S5	\$1,192 \$1,169 \$1,142 \$1,180 \$1,358	\$1,521 \$1,418 \$1,374 \$1,329 \$1,266	\$1,238 \$1,181 \$1,195 \$1,111 \$1,192	\$1,129 \$1,223 \$1,137 \$1,174 \$1,046	\$1,105 \$1,191 \$1,172 \$1,408 \$1,511	\$1,916 \$1,638 \$2,032	\$1,240
17	88888	88888	88888	\$0 \$1,18 \$1,167	\$1,130 \$1,136 \$1,132 \$1,315 \$1,462	\$1,378 \$1,314 \$1,307 \$1,274 \$1,231	\$1,127 \$1,163 \$1,139 \$1,157 \$1,164	\$1,168 \$1,123 \$1,202 \$1,073 \$1,075	\$1,098 \$1,350 \$1,553 \$1,281 \$1,800	\$1,651 \$1,652 \$2,110	\$1,210
16	88888	88888	88888	Si 138 Si 138 Si 138	SI, 112 SI, 133 SI, 348 SI, 471 SI, 359	\$1,327 \$1,250 \$1,258 \$1,260 \$1,143	\$1,130 \$1,106 \$1,087 \$1,120 \$1,125	\$1,079 \$1,142 \$1,000 \$1,040 \$1,275	\$1,196 \$1,603 \$1,458 \$1,610 \$1,759	\$1,978 \$1,223 \$1,792	\$1,203
15	88888	88888	88888	\$0 \$1,099 \$1,124 \$1,073 \$1,061	S1,129 S1,328 S1,439 S1,439 S1,243	S1,236 S1,287 S1,198 S1,229 S1,114	\$1,087 \$1,105 \$1,109 \$1,107 \$1,122	\$1,055 \$1,018 \$1,145 \$1,050 \$1,134	\$1,456 \$1,385 \$1,396 \$1,705 \$1,634	\$1,776 \$2,052 \$1,358	\$1,180
41	88888	88888	88888	\$1,129 \$1,089 \$1,085 \$1,078 \$1,094	S1,299 S1,408 S1,324 S1,214 S1,232	S1,245 S1,157 S1,128 S1,166 S1,128	\$1,116 \$1,093 \$1,112 \$1,142 \$1,016	\$1,081 \$1,151 \$1,174 \$1,203 \$1,399	\$1,417 \$1,300 \$1,460 \$1,732 \$1,519	\$1,524 \$1,478 \$1,586	\$1,167
13	88888	88888	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$1,000 \$1,004 \$1,022 \$1,048 \$1,234	\$1,424 \$1,327 \$1,208 \$1,179 \$1,141	\$1,172 \$1,047 \$1,106 \$1,059 \$1,041	\$1,048 \$1,028 \$1,033 \$1,048 \$1,016	\$1,143 \$1,094 \$1,036 \$1,046 \$1,552	\$1,557 \$1,443 \$1,798 \$1,269 \$1,933	\$1,519 \$1,797 \$1,398	\$1,121
12			\$0 \$0 \$973 \$970				\$1,011 \$986 \$945 \$1,046 \$1,056			\$2,071 \$1,411 \$1,726	\$1,064
Ξ				\$936 \$966 \$1,067 \$1,187 \$1,095						\$1,342 \$0 \$1,391	8087
10	88888									\$1,548 \$1,387 \$1,320	89.82
6				\$943 \$1,005 \$979 \$962 \$933						\$1,283 \$1,258 \$1,205	\$011
∞				8974 8925 8946 8886						\$1,103 \$1,232 \$1,252	888
7				S8 72 S8 73 S8 85 S8 85 S8 85						\$1,125 \$1,144 \$1,236	\$8.18
9				% % % % % % % % % % % % % % % % % % %						\$1,124 \$1,046 \$1,225	\$764
8				\$755 \$737 \$716 \$722 \$703					\$1,024 \$1,026 \$1,026 \$1,092 \$1,158	\$0 \$1,026 \$1,043	\$690
4				\$706 \$722 \$691 \$681						\$1,092 \$1,026 \$1,059	\$998
6				8 8 8 8 8 8 2 2 2 8 8 8 8 8 8 8 8 8 8 8						S0 80 \$1,045	86.59
2				858 854 864 865							\$627
_				7 SS83 4 SS67 8 SS97 1 SS92 5 SS75			•,				\$ \$544
0	8 8524 8684 8609	\$56. \$60.1 \$60.1	858. 8609 8638	\$49.7 \$54.4 \$48.1 \$53.5	855. 851. 851.8 851.8	\$60. \$733 \$834 \$834	\$74. \$83.7 \$1,029 \$838	\$80. \$87.7 \$77.0 \$77.0	\$815 \$786 \$770 \$950	SS12 S884	\$603

obes: Basic pay figures reflect the January, 2019, increase of 2.0%.

Regist agreement from the order of the control of the co

DoD Officers Non-Selected Reserve Personnel With 20 Good Years by PEBD Years of Service and Age for FY 2018 Valuation

		Te .	0 11 0 86 88 11 0	8 4 8 9 8	00440	87888	4 2 5 5 5 5	929	22
		Total	1 6 6 6	153 234 383 570 725	919 1,232 1,624 1,934 2,292	2,763 3,247 3,583 4,065 4,545	4,384 4,506 4,353 4,172 2,343	156 72 346	48,805
		+14	00000	00000	00000	00000	0 0 16 251 268	15 13 224	788
		40	00000	00000	00000	00000	0 18 220 287 125	8 15 36	710
		39	00000	00000	00000	00000	35 257 323 262 127	25 16 24	1,070
		38	00000	00000	00000	0 0 0 36	311 373 330 302 374	32 10 7	1,776
D		37	00000	00000	00000	0 0 0 45 426	392 395 332 837 530	20 2	2,988
		36	00000	00000	00000	0 0 40 373 437	361 381 862 805 281	2 2 5	
		35	00000	00000	00000	0 36 367 442 392	298 897 932 506 193	r & 2	4,077 ears of Ser
		34	00000	00000	00000	58 339 375 347 342	858 825 420 243 129	8 0 %	64 3,951 4,077 3,56. Average PEBD Years of Service:
	(YOS)	33	00000	00000	36 0 0	314 332 315 292 884	975 502 289 215 96	5 1 6	4,264 Averag
	Service	32	00000	00000	0 0 0 32 299	397 369 344 864 903	476 298 221 151 55	\$ 0 4	4,420
	ears Of	31	00000	00000	0 0 17 281 371	303 298 746 828 473	229 188 137 87 36	0 7 7	4,009
	Completed Pay Entry Base Date (PEBD) Years Of Service (YOS)	30	00000	00000	0 31 231 259 223	220 686 687 378 239	168 121 73 54 35	4 4 %	3,420 2
	Date (59	00000	00000	19 217 267 227 193	582 639 330 200 151	117 87 55 56 25	4 0 7	- 4,
	y Base								3,442 3,171 Average Age:
	ay Entry	28	0000	0 0 0 13	130 197 184 160 476	494 255 123 103 95	56 47 49 32 32 23	004	2,442 Avera
	eleted P	27	00000	0 0 0 112 0 80	136 122 135 381 357	184 101 101 60	29 29 21 29 22 23	2 - 4	1,862
	Comp	56	00000	0 0 8 95 135	117 114 258 304 151	58 44 37	26 22 14 10	0 0	1,567
		25	00000	0 12 78 107 83	82 211 248 130 61	48 50 33 34 27	19 13 13 11	7 0 0	1,276
		24	00000	60 2 89 89 55	124 168 145 52 49	39 22 21 20 16	13 15 15 25 25 25 25 25 25 25 25 25 25 25 25 25	0 - 0	1,002 1,276 ce of the Actuary.
		23	0 0 0 0 7	42 60 41 59 140	165 74 54 45 40	24 17 22 10	10 12 6 4 1	0 0 0	847 DoD Offi
		22	0 0 4 4 9 36	52 36 33 91 152	81 48 42 35 19	11 11 7 7	10 18 6 6	000	720
		21	0 0 4 33 37	26 26 70 86 46	35 37 31 17 10	5 111 6 6	4 & 9 & 1	- 0 0	543 on file crea
		20	0 22 26 13	13 86 13 18	24 11 9 7 7 9	3 - 3 - 5 - 5	1 1 0 5 1	0 0 0	301 rial valuati
		19	7 1 1 0	3 0 3 1 1	4 - 0 2 -	1 2 0 0 2	0 0 0 0 0	0 0 0	37 n the actua
		<19	00000	00000	00000	00000	00000	000	0 37 301 543 720 847 1 Data taken from the actuarial valuation file created by the DoD Office
		Age	<3737383940	14	46 47 49 50	51 52 53 54 55	56 57 58 59 60	61 62 63+	Total Notes:

32.2

53.3

Average Age:

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.

DoD Enlisted Non-Selected Reserve Personnel With 20 Good Years by PEBD Years of Service and Age for FY 2018 Valuation

	Total	0 129 233 660 1,029	1,360 1,740 2,104 2,629 2,962	3,721 4,968 6,149 6,748 7,683	8,293 9,150 9,978 11,450 12,594	13,114 13,377 13,240 12,191 6,902	495 262 1,191	154,352
	+	00000	00000	00000	00000	0 0 137 1,705 1,993	188 135 764	4,923
	40	00000	00000	00000	00000	0 129 1,509 2,087 997	57 22 82	4,883
	39	00000	00000	00000	00000	157 1,860 2,429 1,804 733	41 61 64	7,107
	38	00000	00000	00000	0 0 0 0 232	2,118 2,942 2,200 1,497 620	36 17 64	9,726
	37	00000	00000	00000	0 0 0 251 2,142	2,715 1,957 1,528 1,030 541	33 13 29	10,238
	36	00000	00000	00000	0 0 174 1,976 2,592	1,991 1,522 1,159 842 417	21 18 37	10,749
	35	00000	00000	00000	0 183 1,744 2,510 1,985	1,418 1,122 936 653 320	22 9 39	10,941
	34	00000	00000	00000	259 1,799 2,308 1,892 1,349	1,070 864 720 557 249	15 2 31	11,115
(YOS)	33	00000	00000	0 0 0 0 131	1,456 1,760 1,423 1,106 948	778 580 513 432 211	22 3 24	9,387
f Service	32	00000	00000	0 0 0 113 1,422	2,049 1,668 1,206 967 807	652 517 421 334 178	8 6 8I	10,368
Years C	31	00000	00000	0 0 70 1,298 1,977	1,513 1,134 811 694 597	510 414 363 274 155	14 3 10	9,837
(PEBD)	30	00000	00000	0 112 1,236 1,727 1,335	902 699 582 491 455	370 324 262 182 103	12 3 8	8,802
Completed Pay Entry Base Date (PEBD) Years Of Service (YOS)	29	00000	00000	101 1,085 1,632 1,274 920	614 537 456 369 380	270 243 221 167 74	9 0 9	8,355
/ Entry F	28	00000	0 0 0 0 7	812 1,291 1,102 720 570	392 352 358 291 253	246 193 197 153	4 4 %	7,089
leted Pay	27	00000	$\begin{smallmatrix}0&0&0\\4&4\\18\end{smallmatrix}$	895 893 696 467 394	311 276 237 224 229	207 181 200 1111 64	8 7 9	5,922
Comp	26	00000	0 0 49 585 877	742 584 439 387 288	227 218 201 188 186	172 135 123 112 51	9 1 0	5,574
	25	00000	0 47 486 769 640	470 358 351 286 203	210 177 151 162 126	134 104 86 81 40	0 0	4,887
	24	00000	31 404 660 603 388	271 228 228 183 148	139 126 125 120 120	96 88 71 74 32	0 0 0	4,139
	23	0 0 0 35	358 571 407 269 200	181 181 161 118 108	96 85 84 77	74 89 83 45 29	0 5 3	3,330
	22	0 0 0 40 386	515 430 272 191 148	132 113 117 88 100	59 69 62 63	66 65 50 31 11	0 0	3,081
	21	0 0 34 432	326 197 168 113	78 73 73 56	37 31 32 32 33	52 34 22 10	0 0 0	2,391
	20	0 16 162 245 158	113 86 52 50 35	34 35 36 20 20	16 24 24 10	14 10 7 7	0 0 0	1,202
	19	0 113 37 32 18	16 4 9 4 12	8 10 10 10 10 10 10 10 10 10 10 10 10 10	r 4 w 4 w	m 41 41 m 0	0 0 0	306
	<19	00000	00000	00000	00000	00000	0 0 0	0
	Age	^3.7 3.8 3.9 40	14 24 44 45 45	46 48 49 50	51 52 53 54 55	56 57 58 59 60	61 62 63+	Total

- 79 -

32.1

53.4

Average Age:

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.

All DoD Non-Selected Reserve Personnel With 20 Good Years by PEBD Years of Service and Age for FY 2018 Valuation

	Total	140 261 729 1,125 1,125 1,974 1,974 1,670 7,720 7,720 1,056 11,05	
	4 ₊	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	40	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	39	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	38	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	37	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	36	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	35	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	34	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Completed Pay Entry Base Date (PEBD) Years Of Service (YOS)	33	0 0 0 0 0 0 0 0 0 0 0 0 1,770 1,770 1,738 1,338	
Of Servic	32	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
) Years	31	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
e (PEBD	30	0 0 0 0 0 0 0 0 0 0 0 0 0 1,345 1,588 1,588 1,588 1,588 1,588 1,588 1,269 869 869 869 869 869 87 1,269	
Base Dat	29	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
ıy Entry	28	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
pleted Pa	27	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Com	26	0 0 0 0 0 0 0 0 0 1,012 859 699 691 691 439 232 232 258 258 198 198 161 161 161 161 161 161 161 161 161 16	
	25	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	23	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	22	0 0 0 4 4 4 4 4 4 4 4 4 4 4 4 4	
	21	0 38 38 469 469 223 223 223 223 223 223 223 223 223 22	
	20	16 271 271 171 171 173 173 28 28 28 29 20 21 22 21 24 44 45 48 48 48 48 48 48 48 48 48 48 48 48 48	
	19	124 338 338 338 338 34 44 60 60 60 60 60 60 60 60 60 60 60 60 60	
	<19		
	Age	Total Total	

All Officers

CSB Dis	8 8 8 8 80 8 80 80 80	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$30,792 \$393 \$12,777 \$20,956 \$28,078	\$27,262 \$24,930 \$29,926 \$30,451 \$33,155	\$34,193 \$37,611 \$38,311 \$35,813 \$36,725	\$40,867 \$35,958 \$31,865 \$46,786 \$42,066	\$27,817 \$41,184 \$29,039 \$34,968 \$21,904	\$39,336 \$10,360 \$0 \$0 \$0 \$0	80 00 00 80 80 00 80 80 00
CSB Non-Dis	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ \$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 80 \$ 80 \$ 80 \$ 80 \$ 80	\$ 80 \$ 80 \$ 80 \$ 80	\$15,360 \$20,942 \$22,861 \$24,049 \$26,125	\$27,585 \$29,293 \$31,701 \$32,855 \$35,740	\$37,731 \$38,558 \$39,539 \$42,230 \$43,351	\$43,309 \$43,995 \$42,700 \$43,121 \$43,497	\$45,702 \$39,668 \$44,807 \$46,373 \$48,051	\$40,191 \$51,566 \$52,981 \$58,078 \$43,005	\$39,931 \$52,973 \$41,472 \$0 \$0
TERA Res Ret	8 8 8 8 80 8 8 8	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$ 200 8 \$ 200 8 \$ 200 8	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$ 200 \$ 200	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$0 \$0 \$0 \$0 \$26,193	\$0 \$61,986 \$83,095 \$0 \$21,837	\$22,439 \$21,707 \$21,004 \$21,111 \$21,235	\$19,999 \$19,838 \$18,443 \$21,029 \$17,727
cetired Pay TERA Non-Dis	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$17,640 \$23,678 \$26,403 \$25,235 \$27,884	\$29,396 \$31,126 \$32,768 \$33,505 \$33,949	\$35,295 \$35,839 \$34,485 \$34,138 \$37,224	\$35,051 \$36,060 \$33,207 \$34,179 \$30,051	\$25,123 \$27,215 \$25,378 \$27,339 \$28,012	\$28,780 \$29,786 \$30,957 \$32,193 \$32,686	\$33,492 \$33,953 \$33,884 \$34,041 \$35,668
Average Annual Net Retired Pay Reserve TERA Retired Total Non-Dis	\$ 8 8 8 8 8 8 8 8 8	\$8 \$8,301 \$7,700 \$11,709 \$6,026	\$8,049 \$7,956 \$7,608 \$9,203 \$9,441	\$10,112 \$11,474 \$12,235 \$12,052 \$12,581	\$13,121 \$13,406 \$17,185 \$23,105 \$27,939	\$29,584 \$33,617 \$37,494 \$39,848 \$42,024	\$43,319 \$44,750 \$46,534 \$47,883 \$49,461	\$51,125 \$51,998 \$53,173 \$53,927 \$53,547	\$54,496 \$55,036 \$55,208 \$54,518 \$51,368	\$46,297 \$45,363 \$44,864 \$44,568 \$44,576	\$43,629 \$43,156 \$42,396 \$41,118 \$40,094
Average A Reserve Retired	\$ 8 8 8 8 8 8 8 8 8	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$ 20 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$ 20 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$0 \$47,966 \$49,566 \$47,901 \$47,656	\$46,672 \$46,739 \$45,141 \$42,449 \$33,391	\$30,687 \$29,616 \$29,746 \$28,707 \$28,502	\$27,748 \$27,168 \$26,397 \$24,976 \$24,494
Temp Disabled	8 8 8 8 8 8 8 8	\$0 \$0 \$9,402 \$13,135 \$6,854	\$9,233 \$8,082 \$8,340 \$11,665 \$11,881	\$12,890 \$13,962 \$16,015 \$17,028 \$15,191	\$15,908 \$15,707 \$18,792 \$23,707 \$26,767	\$27,219 \$28,489 \$32,666 \$31,579 \$33,336	\$37,688 \$37,432 \$38,171 \$36,539 \$43,375	\$46,834 \$47,053 \$42,600 \$57,619 \$42,139	\$56,360 \$40,943 \$40,584 \$47,904 \$51,577	\$0 \$59,211 \$40,930 \$0 \$0	\$ 20 \$ 20 \$ 20 \$ 20
Perm Disabled	8 8 8 8 8 8 8 8	\$8,301 \$5,998 \$6,348 \$5,316	\$6,548 \$7,839 \$7,045 \$8,281 \$8,554	\$9,443 \$10,942 \$11,249 \$10,952 \$11,896	\$12,455 \$12,438 \$14,011 \$15,155 \$18,018	\$18,371 \$20,264 \$22,261 \$23,749 \$26,940	\$27,206 \$27,832 \$29,760 \$28,615 \$29,650	\$31,314 \$30,224 \$31,632 \$31,435 \$30,427	\$28,299 \$31,580 \$32,791 \$30,225 \$30,042	\$27,121 \$30,798 \$32,012 \$28,184 \$31,921	\$31,220 \$32,814 \$34,021 \$30,905 \$30,210
Non Disabled	\$ 20 8 8 8 8 8 8 8 8	\$0 \$0 \$0 \$41,022 \$0	\$0 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$0 \$0 \$0 \$0 \$0 \$0	\$17,640 \$23,678 \$30,855 \$32,945 \$34,221	\$35,157 \$37,124 \$40,264 \$42,298 \$43,929	\$45,240 \$46,435 \$48,139 \$49,486 \$50,842	\$52,356 \$53,212 \$54,320 \$55,018 \$55,018	\$55,676 \$56,133 \$56,310 \$55,940 \$55,467	\$54,890 \$54,174 \$53,226 \$53,196 \$53,064	\$52,589 \$52,080 \$51,895 \$51,572 \$50,994
CSB I	00000	0000	00000	00000	1 4 4 1 1 1 1 3	18 27 30 39	8 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	25 12 9 5 6	w v	000	0-000
ı	00000	00000	00000	00000	1 2 7 7 14 14 4 35 13	54 18 88 18 138 27 189 30 251 39		320 25 233 12 169 9 120 5	64 43 31 14 14 24 25 27 27	133 × 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	47,100
CSB	00000	00000	00000	00000	0 1 1 0 2 1 0 7 4 0 14 6 0 35 13			0 320 25 0 233 12 0 169 9 0 120 5	0 64 3 1 43 1 1 31 1 0 24 1 43 14 2	255 8 1 310 13 1 312 8 0 271 7 0 235 3 0	211 4 0 150 7 1 127 0 0 107 0 0
TERA TERA CSB CSB Non-Dis Res Ret Non-Dis Dis	00000	00000				250 0 54 362 0 88 376 0 138 299 0 189 248 0 251	207 0 317 189 0 422 128 0 505 91 0 609 65 0 484	36 38 33 33 43 1	72 0 105 1 219 1 431 0 711 43	1,076 255 1,307 310 1,555 312 1,499 271 1,310 235	1,014 745 462 365 290
- Number	0000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 34 0 0 0 0 52 0 0 0 0 0 69 0 0 0 0 0 121 0 0 0 0 120 0 0	0 134 0 0 0 0 0 0 0 0 0 0 0 134 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	314 343 430 660 844	0.0 0 54 2.2 0 88 6.6 0 138 9.9 0 189 8.8 0 251	4,375 207 0 317 5,275 189 0 422 6,251 128 0 605 6,738 91 0 609 6,890 65 0 484	7,333 36 0 7,823 38 0 8,529 23 0 9,177 33 0 9,550 43 1	9,353 72 0 9,384 105 1 9,469 219 1 9,765 431 0 11,397 711 43	15,026 1,076 255 15,482 1,307 310 15,971 1,555 312 15,856 1,499 271 16,089 1,310 235	16,401 1,014 15,992 745 16,647 462 18,070 365 19,803 290
Reserve TeRA TERA CSB CSB Reired Total Non-Dis Res Ret Non-Dis Dis	00000		00000	00000	0 314 0 343 0 430 0 660 0 844	0 1,234 250 0 54 0 1,657 362 0 88 0 2,386 376 0 138 0 3,117 299 0 189 0 3,782 248 0 251	0 4,375 207 0 317 0 5,275 189 0 422 0 6,251 128 0 505 0 6,738 91 0 609 1 6,890 65 0 484	36 38 33 33 43 1	71 9,353 72 0 144 9,384 105 1 222 9,469 219 1 394 9,765 431 0 1,753 11,397 711 43	15,026 1,076 255 15,482 1,307 310 15,971 1,555 312 15,856 1,499 271 16,089 1,310 235	5.662 16,401 1,014 5.313 15,992 745 5.990 16,647 462 6,839 18,070 365 7,874 19,803 290
Temp Reserve TERA TERA CSB CSB Disabled Retired Total Non-Dis Res Ret Non-Dis Dis	00000	0000	19 0 25 3 3 0 0 32 3 0 0 0 0 0 0 0 0 0 0 0 0 0	00000	50 0 314 50 0 343 53 0 430 56 0 660 44 0 844	0 1,234 250 0 54 0 1,657 362 0 88 0 2,386 376 0 138 0 3,117 299 0 189 0 3,782 248 0 251	0 4,375 207 0 317 0 5,275 189 0 422 0 6,251 128 0 505 0 6,738 91 0 609 1 6,890 65 0 484	18 0 7,333 36 0 23 5 7,823 38 0 16 8 8,529 23 0 15 14 9,177 33 0 16 57 9,550 43 1	8 71 9,353 72 0 10 144 9,384 105 1 6 222 9,469 219 1 1 394 9,765 431 0 7 1,753 11,397 711 43	0 4,956 15,026 1,076 255 3 5,260 15,482 1,077 310 2 5,435 15,971 1,555 312 0 5,281 15,856 1,499 271 0 5,296 16,089 1,310 235	5.662 16,401 1,014 5.313 15,992 745 5.990 16,647 462 6,839 18,070 365 7,874 19,803 290
Reserve TeRA TERA CSB CSB Reired Total Non-Dis Res Ret Non-Dis Dis	00000	0 0 0 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15 19 0 27 25 0 39 30 0 88 33 0	26 34 48 48 53 0	50 0 314 50 0 343 53 0 430 56 0 660 44 0 844	48 0 1,234 250 0 54 52 0 1,657 362 0 88 50 0 2,386 376 0 138 60 0 3,117 299 0 189 50 0 3,782 248 0 251	43 0 4,375 207 0 317 41 0 5,275 189 0 422 44 0 6,251 128 0 422 28 0 6,738 91 0 609 31 1 6,890 65 0 484	18 0 7,333 36 0 23 5 7,823 38 0 16 8 8,529 23 0 15 14 9,177 33 0 16 57 9,550 43 1	380 8 71 9,353 72 0 358 10 144 9,384 105 1 334 6 222 9,469 219 1 333 1 394 9,765 431 0 314 7 1,753 11,397 711 43	0 4,956 15,026 1,076 255 3 5,260 15,482 1,077 310 2 5,435 15,971 1,555 312 0 5,281 15,856 1,499 271 0 5,296 16,089 1,310 235	0 5,662 16,401 1,014 0 5,513 15,992 745 0 5,990 16,647 462 0 6,839 18,070 365 0 7,874 19,803 290

All Officers

CSB	Dis	0 00 0	80 S	80	S S	80	S &	8.00	80	08.08	80	2 S	80	0 S	S S	80	S S	888	80	80	08 80	80	80	80	80	0.0	\$33,832	\$18,701	35,100)
CSB		8000	8 8 8	80	800	80	80	800	80	80	80	20 20 20 20 20 20 20 20 20 20 20 20 20 2	80	9 S	800	80	S S	800	08	80	08 80	80	80	08 80	80			\$49,169		
	Res Ret Nor	\$17,370 \$16,684 \$16,641	\$18,883 \$17,989	\$14,440	\$15,655	\$17,064	\$16,626	\$13,540	\$11,408	\$19,004	80	\$18,329 \$20,068	80	2 S	. S S	80	0 8 8	800	0\$	\$0	08 80	80	80	08 80	80			519,912		
	Non-Dis Re	\$36,113 \$37,133 \$39,115								\$42,515			\$27,600	\$56,395 \$0	S S	80	0 S	800	0\$	80	08 8	80	80	08 8	80			\$32,142		
al Net Retire	Total	\$40,113 \$40,491 \$40,680	\$41,026 \$41,347							\$45,682				\$46,686 \$46,084	\$43,618	\$42,246	\$43,128 \$42,355	\$41,875	\$43,040	\$38,872	\$42,828 \$48,955	\$39,893	\$44,195	\$35,560	80	0.0	\$44,531			
e Ann	Retired	\$24,711 \$24,529 \$25,055	\$25,169 \$24,441	\$24,059	\$23,372	\$22,338	\$21,760	\$21,190	\$21,460	\$21,287	\$19,766	\$19,141 \$19,328	\$20,624	\$20,400 \$19,320	\$18,719	\$18,093	\$17,713	\$19,503	\$20,495	\$21,759	\$21,06/	\$26,837	\$21,040	\$31,140	80	90	\$24,964	\$24,843	824,330	201,000
Temp Re		08 80	80 S	80	S S S	80	0S S	S S S	80	800	80	0 8 8	80	9 S	S S	80	0 S	888	80	80	0s 8	80	80	08 8	80	0.0	\$26,038	\$51,711	\$21,027	•
	Disabled Di	\$30,333 \$29,153 \$28,23	\$28,584 \$28,584 \$30,651	\$30,959	\$34,934	\$40,336	\$40,066	\$42,185	\$45,625	\$47,474	\$47,286	\$45,252 \$49,004	\$47,465	\$51,694 \$45,950	\$37,221	\$40,382	\$36,246	\$35,659	\$42,078	\$32,409	\$23,508	80	\$87,900	08 80	80	0.0	\$28,685	\$33,842	624,715	51,11
	Disabled D	\$51,184 \$52,098 \$52,497	\$52,763 \$52,920	\$52,571	\$52,402	\$53,132	\$54,445	\$55,683	\$57,428	\$58,043	\$60,210	\$61,102	\$64,101	\$66,487	\$67,371	\$66,065	\$66,057	\$64,046	\$62,162	\$62,842	\$58,815	\$52,949	\$69,956	\$44,400	80	0.0	\$53,350	\$53,941	653 880	100,000
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CSB	Dis	000	000	00		0	00		0	00	. 0	00	0	00	00	0	00		0	0	00	0	0	0	0	Þ	442	n c	1 -	•
CSB	Non-Dis	000	000	00	00	00	00	00	0	00	0	00	0	00	00	0	00	00	0	0	00	0	0	00	0	0	4,272	S 5	5 5	1
TERA		96	3 4 5	38	30	35	27	12	e 8	mm	0	v 4	0	00	00	0	00	00	0	0	0	0	0	0	0	0	2,708	2,705	1,407	1,161
TERA	Non-Dis	249	77 77	37	12	9	∞ ∞		24	ν.	. —			- 0	00	0	00	00	0	0	0	0	0	0	0	0	14,681	0.426	5,065	,,,,,
Number	Total	21,428 22,645 15,846	15,707	15,009	11,804	10,715	10,032	8,610	7,597	7,262	6,218	5,1/5 4,043	2,587	1,886	1,905	1,350	1,101	363	177	88	38 26	14	50	3 0	0	0	543,046	200 402	343,093	20000
Reserve	Retired	8,607 9,076	6,320 5,920	5,813	4,048	3,656	3,433	2,931	2,491	2,404	2,327	1,992	956	792 817	891	628	471 365	246	74	46	22	7	60	7 0	0	0	150,729	149,813	177,128	2416141
Temp	Disabled	000	00	00	00	0	00	00	0	00	0	00	0	00	00	0	00		0	0	0	0	0	0	0	0	1,184	71) C	,
Perm	Disabled	450 550 402	382 382	390	271	204	180	157	133	133	118	¥ 80	71	55	63 86 86	79	83	4 ×	15	∞ •	4 —	0	- 0	00	0	D .	19,379	9,042	7.510	24767
Non	Disabled	12,371 13,019 8 976			7,485										951			260				7	- 0	- 0	0	0	371,754	237,938	20,022	111004
	Age	12 22 22	545	75	: 8º 6	80	≅ &	8 2	\$ \$	8 8	8	8 8	91	2 2	2 8	96	6 8	8 9	101	102	104	105	106	108	109	110	Total	+ 09	. 70	3

Notes: /

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

60+ is to sal for ages 60 and over.

60+ is total for ages 62 and over.

60+ is total for ages 65 and over.

10- linculades only retires receiving payment from DoD.

Inculades only retires receiving payment from DoD.

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

Carer Status Bount (CEB) retirees and payments are included in the appropriate categories.

Pay amounts do not included the 121/118 cost of living increase of 2.8%.

All Enlisted

CSB		S S	8 8 8	80	0 8 8	80 80 80	80	0S S	80 80	80	0S S	\$1,454 \$10,359	\$15,622	\$13,876	\$17,859	\$19,191 \$20,129	\$22,547 \$22,950 \$26,493	\$26,448	\$27,841 \$26,490	\$33,668	\$53,999 \$40,469	\$27,440 \$34,500	\$26,897 \$31,968	2 2 S	800	08 88	9 9	S S S	80
CSB Non-Dis	80	0S S	8 8 8	80	08 80 80	80 80	08	0S S	80 80	80	0S S	80 80	\$19,363	\$2,556	\$981	\$1,244 \$1,512	\$1,464 \$1,385 \$1,254	\$1,148	\$993	\$772	\$870	\$737 \$1,052 \$902	\$847 \$372	\$619 \$891 \$584	\$520	\$1,779	\$1 732	\$0 \$0 \$0 \$0 \$0	0\$ 80
TERA Res Ret		S S	8008	0\$	8 80	80 80	80	20 20 20 20	80 80 80	80	08 80 80	80 80	800	\$0 80	80	S S	8 8 8 80 8	800	80	9 S		\$13,120 \$0 \$0 \$0	\$0 80	\$0 \$11,021 \$8,732	\$8,719	\$7,825 \$7,781	67,57,5	\$7,490 \$7,490 \$7,434	\$7,150 \$7,184
etired Pay TERA Non-Dis	80	0\$ S	\$ 80 80 80 80 80 80 80 80 80 80 80 80 80 8	80	80	80 80	80	0S SO SO	\$0 80	80	\$16,830	\$14,881	\$15,737	\$15,203 \$15,428	\$15,755	\$16,407	\$17,314 \$17,043 \$17,521	\$17,308	\$18,051	\$20,531	\$13,654	\$12,803 \$12,468 \$12,588	\$12,919	\$13,508 \$14,158 \$14,863	\$15,265	\$15,650	\$15,541	\$15,857	\$16,784
Average Annual Net Retired Pay Reserve TERA Retired Total Non-Dis	80	S S	\$10,518	\$6,589	\$5,738 \$5,118	\$4,894 \$4,457	\$3,670	\$3,767	\$3,770 \$4,029	\$4,169	\$4,637 \$4,836	\$5,348 \$5,885	\$6,595	\$10,811	\$18,266	\$19,722	\$21,699 \$22,513 \$23,112	\$23,621	\$24,128 \$24,409	\$24,950	\$25,418	\$25,473 \$25,345 \$24,856	\$24,583 \$24,284	\$23,705 \$23,416 \$22,452	\$20,479	\$19,982	\$19,800	\$19,356	\$18,869
Average A Reserve Retired		0\$ S	8 8 8 8 8	80	08 80	80 80	80	0S S	\$0 80	80	0S SO SO SO SO SO SO SO SO SO SO SO SO SO	\$0 \$0	800	80	\$0	808	S S S	808	80	\$0	\$50,126	\$25,258 \$26,753 \$23,820	\$24,744 \$24,562	\$24,521 \$21,715 \$14,789	\$13,168	\$12,309	\$12,097	\$11,648	\$11,129
Temp Disabled	80	S S	\$11,817	\$8,616	\$6,403	\$6,192 \$5,541	\$5,281	\$6,070	\$5,185 \$5,679	\$5,986	\$7,313	\$8,069	\$9,288	\$10,688	\$15,920	\$18,452	\$20,159 \$22,264 \$21,815	\$22,324	\$24,841 \$24,644	\$25,972	\$23,785	\$22,650 \$26,013 \$21,333	\$28,602 \$24,300	\$23,243 \$29,515 \$22,127	\$32,042	\$36,626 \$21,929	Q 9	80 S	80
Perm Disabled	80	S S	\$130 \$5,546	\$3,674	\$3,192	\$3,705 \$3,604	\$2,761	\$2,964	\$3,479	\$3,899	\$4,306 \$4,497	\$5,039 \$5,397	\$5,891	\$6,663	\$8,320	\$9,717	\$12,033 \$13,161 \$13,747	\$14,221	\$14,569	\$15,137	\$14,823	\$13,666 \$14,364 \$14,281	\$14,484 \$14,184	\$13,281 \$13,445 \$13,606	\$13,867	\$14,059	\$13,756	\$13,555	\$10,313
Non Disabled	\$0	800	8 8	08	80	20 S	\$00	\$20,178	80 80 80	\$21,111	\$51,247	\$14,881	\$15,979	\$19,150 \$21,137	\$21,895	\$22,402 \$23,014	\$23,414 \$23,926 \$24,345	\$24,790	\$25,087	\$25,733	\$25,987	\$26,140 \$25,905 \$25,365	\$25,053 \$24,704	\$24,108 \$23,817 \$23,529	\$23,231	\$23,126	\$23,023	\$23,389	\$24,079 \$24,447
' Д																													
i	0	00	00	00	00	00	0 0	00	00	0 (00	7 7	3	17	31	36 45	3 3 9 8	32	26	4 5	7 9 9	0		000	00	000	0 0	000	00
CSB	0 0	00	» o o	0 0	00	0 0	0	0 0	0 0	1000	00	2 2 2 2	5 3				3,208 4,095 5,092 32		8,226 26 8,579 17		3,095 6	2,200 0 1,633 1 1,182 1	875 1 658 1	432 0 326 0 205 0	180 0 127 0	80 0 87 0	33 0	0 0 0	000
i	0 0 0	00	0 0 0	0 0 0	000	0 0 0	0 0	000	0 0 0 0	0 1 0	00	$\begin{array}{cccc} 0 & 0 & 2 \\ 0 & 2 & 2 \end{array}$	0 5 3								0 3,095 6	1 2,200 0 0 1,633 1 0 1,182 1	0 875 1 0 658 1	0 432 0 5 326 0 108 205 0		401 80 0 409 87 0			332 0 0 391 0 0
CSB CSB Non-Dis Dis	0 0 0 0	0 0 0		0 0 0		0 0 0 0 0		0 0 0 0	00	0 0 1 0	2 0 0 0	12 0 0 2 69 0 2 2	0 0	0 0 168 1 0 685	8 0 1,268	7 0 1,874		4 0 5,937 8 0 6,976			00	171 1 2,200 0 370 0 1,633 1 835 0 1,182 1	3 0	9 0 7 5 7 108	6 453 8 411	4 401	3 390		0 7 0
TERA CSB CSB Res Ret Non-Dis Dis	0 0 0 0 0 0	00		78 0 0 0 0	202 0 0 0 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	524 0 0 0 0	1,097 0 0 0 0 0 1,097	1,340 0 0 0 0 0 1,651 0 0 0 0 0	2,070 0 0 1 0	2,908 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0	630 0 168 911 0 685	958 0 1,268	939 0 1,874 757 0 2,424	.8 0 3,208 13 0 4,095 18 0 5,092	184 0 5,937 138 0 6,976	113 0 8,226 62 0 8,579		52 0	0 0 0 5	1,583 0 2,796 0	9 0 7 5 7 108	4,576 453 3.888 411	2,954 401 2,171 409	1.493 390	2 343 295	497
TERA TERA CSB CSB Non-Dis Res Ret Non-Dis Dis	0 0 0 0 0 0 0	00	000	-					0 1,340 0 0 0 0 0 1,651 0 0 0 0				3,380 146 0 3,262 320 0	3,989 630 0 168 6,240 911 0 685	8,672 958 0 1,268	10,568 939 0 1,874 11,977 757 0 2,424	548 0 3,208 383 0 4,095 258 0 5,092	19,074 184 0 5,937 21,532 138 0 6,976	23,598 113 0 8,226 23,540 62 0 8,579	24,546 48 0 6,969	52 0	370 0 835 0	37,355 1,583 0 38,504 2,796 0	3,819 0 4,397 5 4.687 108	47,695 4,576 453 46,384 3,888 411	2,954 401 2,171 409	42,416 1,493 390	861 343 658 295	42,434 497 43,249 410
- Number	0 0 0 0 0 0 0	00	31 0	0 0	00	00	0	00		0	00	00	0 3,380 146 0 0 3,262 320 0	3,989 630 0 168 6,240 911 0 685	0 8,672 958 0 1,268	0 10,568 939 0 1,874 0 11,977 757 0 2,424	13,726 548 0 3.208 15,668 383 0 4,095 17,268 258 0 5,092	0 19,074 184 0 5,937 0 21,532 138 0 6,976	23,598 113 0 8,226 23,540 62 0 8,579	0 24,546 48 0 6,969	0 28,622 52 0	30,924 171 1 33,717 370 0 35,707 835 0	34 37,355 1,583 0 58 38,504 2,796 0	150 39,120 3,819 0 392 38,583 4,397 5 3,503 40,326 4,687 108	47,695 4,576 453 46,384 3,888 411	44,964 2,954 401 43,688 2,171 409	13,020 43,837 1,662 344	41,079 861 343 40,798 658 295	15,659 42,434 497
Reserve TERA TERA CSB CSB Retired Total Non-Dis Res Ret Non-Dis Dis	0 0 0 0 0 0 0 0	00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	46 0	123 0	00	0	196 254 0	00	259 0	270 0	00	261 0 3,380 146 0 228 0 3.262 320 0	0 3,989 630 0 168 0 6,240 911 0 685	199 0 8,672 958 0 1,268	204 0 10,568 939 0 1,874 189 0 11,977 757 0 2,424	0 13,726 548 0 3,208 0 15,668 383 0 4,095 0 17,268 258 0 5,092	129 0 19,074 184 0 5,937 101 0 21,532 138 0 6,976	0 23,598 113 0 8,226 0 23,540 62 0 8,579	68 0 24,546 48 0 6,969	53 0 28,622 52 0	7 33,717 370 0 18 35,707 835 0	20 34 37,355 1,583 0 17 58 38,504 2,796 0	150 39,120 3,819 0 392 38,583 4,397 5 3,503 40,326 4,687 108	3 11,763 47,695 4,576 453 1 12,278 46,384 3,888 411	11,971 44,964 2,954 401 11,251 43,688 2,171 409	0 11,45/ 42,416 1,495 590	13,734 40,798 658 295	0 14,957 42,434 497 0 15,659 43,249 410
Temp Reserve TERA TERA CSB CSB Disabled Retired Total Non-Dis Res Ret Non-Dis Dis	0 0 0 0 0 0 0 0 0		8 0 9 0 0 1 31 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	32 46 0	36 97 0 79 123 0	155 142 0 239 188 0	189 0	583 196 0 843 254 0	229 0 237 0	259 0	270 0	294 0 250 0	2,971 261 0 3,380 146 0 2,710 228 0 3,262 320 0	2,521 211 0 3,989 630 0 168 2,383 189 0 6,240 911 0 685	2,231 199 0 8,672 958 0 1,268	2,169 204 0 10,568 939 0 1,874 2,090 189 0 11,977 757 0 2,424	173 0 13,726 548 0 3,208 158 0 15,668 383 0 4,095 137 0 17,268 258 0 5,092	2,079 129 0 19,074 184 0 5,937 2,091 101 0 21,532 138 0 6,976	102 0 23,598 113 0 8,226 83 0 23,540 62 0 8,579	1,814 68 0 24,546 48 0 6,969	1,681 52 1 26,186 43 0 1,666 53 0 28,622 52 0	31 4 30,924 171 1 29 7 33,777 370 0 26 18 35,707 835 0	20 34 37,355 1,583 0 17 58 38,504 2,796 0	146 11 150 39,120 3,819 0	1,382 3 11,763 47,695 4,576 453 1,322 1 12,278 46,384 3,888 411	2 11,971 44,964 2,954 401 1 11,251 43,688 2,171 409 0 11,327 13,688 2,171 409	1,256 0 11,45/ 42,416 1,495 590	1,504 0 12,927 1,002 0-11 1,548 0 12,924 41,079 861 343 1,613 0 13,734 40,798 658 295	0 14,957 42,434 497 0 15,659 43,249 410

All Enlisted

CSB Dis	8 8 8 8	8 8 8 8 8 8	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	20202	\$ 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 20 8 80 \$ 20 8 80	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$23,096 \$0 \$0 \$0 \$0
CSB Non-Dis	00000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	88888888888	\$1,028 \$686 \$826 \$698
TERA Res Ret	\$7,430 \$7,210 \$7,342 \$7,103	\$7,340 \$6,755 \$6,610 \$5,971 \$6,431	\$5,545 \$5,554 \$6,394 \$5,947 \$6,175	\$5,569 \$9,069 \$5,133 \$0 \$0	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	88888888888	\$7,455 \$7,451 \$7,323 \$7,189
tired Pay TERA Non-Dis	\$17,745 \$18,543 \$18,602 \$19,646 \$19,961	\$19,918 \$20,798 \$21,706 \$22,635 \$21,848	\$17,975 \$21,469 \$24,359 \$0 \$0	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 30 \$ 30 \$ 30 \$ 30 \$ 30 \$ 30 \$ 30 \$ 3	\$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20 \$ 20	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$15,071 \$15,643 \$15,996 \$16,556
Average Annual Net Retired Pay Reserve TERA Retired Total Non-Dis	\$18,972 \$19,106 \$19,223 \$19,638	\$20,319 \$20,563 \$20,825 \$20,665 \$20,665	\$21,274 \$21,670 \$21,783 \$22,052 \$22,598	\$22,718 \$22,597 \$22,467 \$22,781 \$22,755	\$23,149 \$22,278 \$22,211 \$22,391 \$22,196	\$21,424 \$21,320 \$22,011 \$22,898 \$22,798	\$19,404 \$20,963 \$18,812 \$16,834 \$30,768 \$15,984 \$21,072 \$0 \$0 \$0	\$21,218 \$20,247 \$20,127 \$20,148
Average An Reserve Retired	\$11,303 \$10,945 \$10,932 \$10,950 \$10,827	\$10,716 \$10,260 \$10,097 \$10,019 \$9,806	\$9,738 \$9,857 \$9,927 \$10,200 \$10,671	\$10,398 \$10,352 \$10,245 \$10,380 \$10,799	\$11,161 \$11,108 \$11,276 \$11,079 \$11,056	\$10,916 \$11,192 \$10,119 \$12,047 \$11,641	\$11,974 \$12,947 \$12,688 \$6,533 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$11,340 \$11,310 \$11,172 \$10,964
Temp Disabled	8 8 8 8 8 8 8 8	8 8 8 8 8 8	\$ 80 \$ 80 \$ 80 \$ 80	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 80 \$ 80 \$ 80 \$ 80	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	888888888	\$11,845 \$26,403 \$32,865 \$0
Perm Disabled	\$9,438 \$10,135 \$11,909 \$13,197	\$15,740 \$15,723 \$17,929 \$17,777 \$18,049	\$18,340 \$17,871 \$18,096 \$18,283 \$17,254	\$16,595 \$15,275 \$16,832 \$17,004 \$17,496	\$19,062 \$19,877 \$19,864 \$20,625 \$21,756	\$19,512 \$26,283 \$29,353 \$25,899 \$34,084	\$5,172 \$0 \$2,464 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	\$10,985 \$13,424 \$13,395 \$13,312
Non Disabled	\$24,916 \$25,264 \$25,286 \$25,342 \$25,395	\$25,087 \$24,962 \$24,789 \$24,618 \$24,747	\$24,989 \$25,371 \$25,462 \$25,544 \$25,850	\$26,125 \$26,193 \$25,911 \$26,018 \$25,884	\$25,680 \$25,171 \$25,132 \$25,436 \$24,917	\$24,012 \$24,063 \$24,635 \$25,223 \$24,860	\$22,260 \$23,635 \$21,262 \$22,345 \$30,768 \$15,984 \$21,072 \$0	\$24,537 \$24,301 \$24,416 \$24,687
CSB Dis	00000	. 00000	00000	00000	00000	00000	000000000	410 0 0
CSB (Non-Dis	00000		00000	00000	00000	00000	000000000	71,400 746 361 67
TERA Res Ret	387 344 227 192	148 119 78 87 87	112 88 95 52 50	V 8 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000	00000	000000000	6,128 6,122 5,561 4,340
TERA Non-Dis	352 287 169 115	68 48 48 16 25	0 0 5 8 8	00000	0000	00000	000000000	45,027 24,483 15,220 6,207
Number Total	43,894 42,580 29,112 27,913	28,523 24,627 22,525 21,544 21,497	21,834 20,346 18,810 16,327 14,117	12,752 11,570 10,505 8,516 6,110	4,210 2,771 2,032 1,575 1,111	769 517 353 245 127	60 36 21 21 13 13 13 0	1,458,308 921,796 833,775 698,739
Reserve Retired	16,477 16,194 11,108 10,155	8,923 6,928 5,796 5,606 5,352	5,123 4,658 4,275 3,528 2,813	2,504 2,323 2,050 1,521 1,100	648 534 401 312 211	141 115 69 44 24	15 6 9 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	261,670 261,006 245,740 210,240
Temp Disabled	00000	00000	00000	00000	0000	00000	000000000	5,775 17 4 0
Perm Disabled	2,366 2,005 1,276 1,076 881	829 702 486 494	448 405 379 396 373	426 440 447 301	188 96 72 66	32 28 16 15 6	00000000	96,923 31,818 29,145 25,175
Non Disabled	25,051 24,381 16,728 16,682	18,771 16,997 16,127 15,452 15,651	16,263 15,283 14,156 12,403 10,931	9,822 8,807 8,008 6,576 4,709	3,374 2,141 1,559 1,197 869	596 374 268 186 97	4 + 1	1,093,940 628,955 558,886 463,324
Age	12244	5 6 7 8 6 8	28 88 28 88	8 & 8 & 8	9 2 2 2 2 2 3 2 3 4 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	96 97 100	101 102 103 104 105 106 107 108 110	Total 60+ 62+ 65+

Notes: Age is retired'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 exceiving powers from DoD.

Includes only enteres receiving powers that from DoD.

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

Carece Status Bonney 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 included the 121/18 cost of living increase of 2.8%.

II DoD

CSB	Dis	80	80	80 80 80	08	80	20 20 20 20 20 20 20 20 20 20 20 20 20 2	80	208	8 S	800	\$0	\$10,359	\$19,414	\$13,667	\$20,878	\$21,881	\$25,709	\$30,152	\$31,095 \$34,994	\$34,477 \$33,172 \$35,000	\$38,639	\$37,461	\$43,561	\$27,587	\$29,039 \$34,968	\$21,904	\$39,336 \$10,360	20 80 80	80	80 80 80 80	000	>
CSB	Non-Dis				0\$									\$18,696			\$1,982				\$3,223 \$3,509 \$3,537			\$3,932	\$3,904	\$3,578 \$4,010	\$3,619	\$2,208 \$4,938	\$6,434 \$5,265	\$3,584	\$6,661	\$41,472 \$0 \$0)
TERA	Res Ret	0\$	80	80 80	0\$	208	80 80 80	0\$	208	80 80 80	800	0,5	80	08	0,5	80	808	08	80	\$0 80 80	0 8 8 8 8 8	0\$	\$13.120	\$26,193	\$61,986	\$83,095	\$12,464	\$13,660	\$13,591	\$12,711	\$12,520	\$10,655 \$10,990 \$9,449	
etired Pay	Non-Dis	0\$	80	0S 0S	0\$	2 S	S S	08.9	88	0 S S	08.0	\$16,830	\$14,881	\$15,824	\$15,745	\$17,115	\$19,138	\$23,603	\$25,573	\$26,830 \$28,262	\$26,779 \$27,863 \$30,133	\$24,839	\$23,114	\$14,246	\$13,449	\$14,152 \$15,335	\$16,595	\$17,838	\$20,929 \$22,371	\$23,554	\$24,323 \$24,252	\$23,578 \$24,091 \$24,897	
Average Annual Net Retired Pay Reserve	Total	08	80	\$10,518 \$7,883	\$6,589	\$5,143	\$5,094 \$4,547	\$3,937	\$3,757	\$4,220 \$4,396	\$4,530	\$5,383	\$5,812	\$7,150	\$11,431	\$19,124	\$20,753	\$24,038	\$26,510	\$27,296	\$28,820	\$30,925	\$31,123	\$31,460	\$30,573	\$29,845	\$28,823	\$26,664 \$26,405	\$26,503 \$26,536	\$26,614	\$26,091 \$26,025	\$25,881 \$25,514 \$25,538	
Average A Reserve	Retired					200	2 S	88	8.08	2 S	88	98					800	S S	80	\$ 80 80	\$0 80 80 80 80 80	\$30,126	\$47,966	\$40,851	\$39,571	\$36,826	\$20,993	\$18,361	\$17,754	\$17,289	\$16,542	\$15,98/ \$15,474 \$15,672	1
Temp	Disabled			\$11,817		\$6,427	\$6,289	\$5,642	\$5,467	\$6,001	\$6,615	\$9,152	\$9,233	\$10,353	\$12,315	\$17,884	\$20,122	\$22,963	\$24,895	\$26,165	\$28,858	\$30,298	\$30,826	\$36,788	\$36,533	\$29,363	\$34,253	\$32,042 \$53,478	\$38,778	80	800	08 8	ř
Perm	Disabled			\$130 \$5,546							\$4,212			\$6,413	\$7,470	\$9,493	\$11,027	\$13,529			\$17,538 \$17,706 \$17,060		\$17,411	\$17,861	\$17,051	\$16,911 \$16,642	\$16,822		\$17,201			\$13,702 \$13,317 \$12,130	
Non	Disabled	0\$	80	8 8 8	0\$	0\$	\$41,022 \$0	\$0	\$0	0 8 8 8	\$21,111	\$24,302	\$14,881	\$16,054	\$19,734	\$22,797	\$23,535	\$25,894	\$27,881	\$28,618 \$29,205	\$29,935 \$30,695 \$31,275	\$31,784	\$31,950	\$32,136	\$31,169	\$30,289	\$30,168	\$30,194 \$30,317	\$30,488	\$30,867	\$30,946	\$31,870 \$32,310 \$32,779	
CSB	Dis	00	0	00	00	00	00	00	00	00	00	. 0 .	7 71	4 10	17.8	24	¥ &	88	71	80 67	1.88	37	81 6	9 1-	4 0		2		00	0	0 - 0	000	>
CSB	Non-Dis	00	0	00	00	00	00	0-	0	00	10	00	5 0	9 0	175	1,303	1,928	3,346	5,343	6,254 7,398	8,731 9,188 7,453	5,055	3,328	1,753	939	463 350		188 140				-00	•
TERA	Res Ret	00	0	00	00	000	00	00	0	00	00	.00	00	00	00	00	00	00	0	00	000	0	0 -	0 -	0 -	5	151	708 721	713	625	555 493	417 459 498	
r TERA	Non-Dis	00	0	00	00	00	00	00	0 0	00	00	. 72	73	153 335	662	1,079	1,189	924	206	391 327	241 153 113	27 67	8 2	403 878	1,655	4,038 4,828	5,398	5,652 5,195	4,509 3,670	2,803	2,076	1,120 862 700	-
Number	Total	00	0	31		204		558	-1		2,204		3,623	3,694				16,112			29,849 30,278 31,436	33,519	36,445	42,894		48,589 48,348			60,935 59,544			57,445 60,504 63.052	
Reserve		0	0	8 I. 0 0							2 0			- 8			1.2			00	146 111 90	0 1	6 5	21 21 75	28 105 27 202	7 372 7 786	7 5,256	3 16,719 4 17,538	4 17,406 1 16,532		0 18,682 0 18,495	0 19,724 0 21,796 0 23,533	
	d Disabled	0 0	0	1 10 2	32 4			350 208			1,918 285			3,228 311 2.988 278			2,556 252 2,408 241				2,671 14 2,450 11			2,060 4		1,795 1	_	,712 ,632	332 332	503	559 527	,905 ,331 ,615	
	led Disabled	00	0	00	00		- 0	0	- 0	0 0	1,5	. 62	74 3,	155 3,2 339 2.5				13,524 2,3 16,158 2,4			27,032 2,6 27,717 2,4			40,769 2,0 43,107 2,0		46,405 1,7 45,807 1,7			41,931 1,5 41,379 1,6			35,816 36,377 36,904 2,6	4
- Nor	Age Disabled	16	18	5 2	21	333	25	26	285	88	33	33.	35				_				48 49 27 20 20 20												

:		20020	22222	\$00000 \$00000 \$00000	\$000 \$000 \$000 \$000 \$000	\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$20 \$0 \$0 \$0 \$0	2222	\$28,666 \$18,701 \$5,180 \$0
	CSB Dis									\$28 \$18 \$5
	CSB Non-Dis	80888	888888	8 8 8 8	88888	8 8 8 8	\$ 20 \$ 20 \$ 20 \$ 20	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	88888	\$3,224 \$4,572 \$6,188 \$9,119
	TERA Res Ret	\$9,322 \$9,277 \$9,048 \$9,134	\$9,602 \$8,790 \$7,840 \$9,122 \$8,448 \$9,294	\$7,697 \$6,828 \$7,196 \$7,524 \$6,897	\$9,600 \$15,532 \$5,133 \$18,329 \$20,068			2222		\$11,285 \$11,270 \$11,035 \$10,147
ired Pay .	TERA Non-Dis	\$25,355 \$26,155 \$27,203 \$26,667	\$28,998 \$29,514 \$26,923 \$33,494 \$29,736	\$34,407 \$29,820 \$38,234 \$44,261 \$54,215	\$42,515 \$50,181 \$29,424 \$45,610 \$37,908	\$27,600 \$56,395 \$0 \$0 \$0 \$0	88888	\$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00 \$00	20000	\$19,208 \$20,825 \$22,437 \$24,571
ual Net Ret	Total	\$25,907 \$26,531 \$26,786 \$27,339	\$27,387 \$27,438 \$27,494 \$28,122 \$28,348 \$28,028	\$28,114 \$28,418 \$28,664 \$29,882 \$30,586	\$31,050 \$30,870 \$30,782 \$31,005 \$31,915	\$32,447 \$32,163 \$33,581 \$34,011 \$34,511	\$34,690 \$36,160 \$36,361 \$36,012 \$37,226	\$37,056 \$33,715 \$36,444 \$38,255 \$39,285	\$39,493 \$21,072 \$35,560 \$0	\$27,544 \$27,347 \$27,319 \$27,466
Average Annual Net Retired Pay	Reserve Retired	\$15,903 \$15,824 \$16,129 \$16,405	\$10,038 \$15,979 \$15,457 \$15,556 \$15,265 \$14,893	\$14,562 \$14,581 \$14,508 \$15,091 \$15,738	\$15,731 \$15,302 \$15,307 \$15,348 \$15,778	\$16,801 \$16,658 \$16,671 \$16,737 \$16,897	\$16,777 \$16,433 \$17,619 \$18,372 \$20,494	\$19,059 \$20,317 \$19,333 \$22,046 \$26,837	\$21,040 \$0 \$31,140 \$0 \$0	\$16,319 \$16,245 \$16,090 \$15,850
7	Temp Disabled	80000	88888	200000	22222	22222	22222	88888	8 8 8 8	\$14,260 \$36,875 \$43,439 \$0
	Perm Disabled	\$12,777 \$14,229 \$15,821 \$17,458	\$20,609 \$20,153 \$23,207 \$24,796 \$24,563	\$24,567 \$24,128 \$25,152 \$24,775 \$24,711	\$23,942 \$22,276 \$23,192 \$23,849 \$25,816	\$26,848 \$31,730 \$31,161 \$28,730 \$34,430	\$34,365 \$33,733 \$35,390 \$33,091 \$43,811	\$39,772 \$32,409 \$44,059 \$9,479 \$0	\$87,900 \$0 \$0 \$0 \$0 \$0 \$0	\$13,935 \$17,942 \$18,060 \$18,230
	Non Disabled	\$33,600 \$34,605 \$34,788 \$34,934	\$34,638 \$33,863 \$33,442 \$33,542 \$33,308	\$33,325 \$33,626 \$33,943 \$35,301 \$35,724	\$36,492 \$36,838 \$36,895 \$37,131 \$38,272	\$37,827 \$38,653 \$41,827 \$44,002 \$44,466	\$45,836 \$49,004 \$48,423 \$47,855 \$48,870	\$48,862 \$45,768 \$46,570 \$51,170 \$50,177	\$42,970 \$21,072 \$44,400 \$0 \$0	\$31,845 \$32,921 \$33,228 \$33,749
	CSB Dis	0000	00000	00000	00000	00000	00000	00000	00000	852 5 2 1
	CSB Non-Dis	0000		00000	00000	00000	00000	00000	00000	75,672 811 404 82
	TERA Res Ret	478 440 278 232	186 186 108 118 130	139 101 107 68 58	10 6 7 7 7 7	00000	00000	00000	00000	8,836 8,827 7,968 5,854
	TERA Non-Dis	601 486 289 192	22 82 23 37 38 27 8	16 14 9 9 6	2 8 1 1 1 1 2 2	000	00000	00000	0000	59,708 35,696 24,646 11,272
 Number 	Total	65,322 65,225 44,958 43,620		31,866 29,643 27,420 24,929 21,714					003-0	2,001,354 1,338,621 1,224,177 1,041,832
	Reserve Retired	25,084 25,270 17,576 16,475	13,406 14,736 11,532 9,844 9,337 9,008	8,556 7,822 7,206 6,402 5,304	4,908 4,647 4,377 3,513 2,643	1,604 1,326 1,218 1,203 936	769 586 434 290 195	89 55 29 13	0000	412,399 410,819 388,844 337,368
	Temp Disabled	0000	00000	00000	00000	00000	00000	00000	00000	6,959 29 9 0
	Perm Disabled	2,816 2,555 1,678 1,488	1,203 1,219 975 873 718 698	628 568 536 542 542 506	559 583 565 553 409	259 153 127 129 117	111 1111 83 57 34	16 8 4 8 0 0	-0000	116,302 40,860 37,543 32,685
	Non Disabled	37,422 37,400 25,704 25,657	24,610 27,577 24,543 23,612 22,837 22,506	22,682 21,253 19,678 17,985 15,904	14,547 12,962 11,781 9,625 7,101	4,934 3,178 2,535 2,148 1,657	1,239 921 681 446 261	132 8 23 8 8 8 8	0 0 1 1 2	1,465,694 886,913 797,781 671,779
	Age	71 72 73 74	c 57 7 8 6 7 8 8 9 8 9 8	28 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	% & & & & & & & & & & & & & & & & & & &	93 25 36 56 56 56 56 56 56 56 56 56 56 56 56 56	96 98 98 100	101 102 103 104 105	106 107 108 110	Total 60+ 62+ 65+

- 86 -

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

62+ is total for ages 60 and over.

65+ is total for ages 62 and over.

165- is total for ages 62 and over.

166- is total for ages 62 and over.

166- is total for ages 62 and over.

167- is total for ages 63 and over.

168- is total for ages 63 and over.

169- is total for ages 63 and over.

160- is total for

-	Total	\$14,475	\$8,683	\$8,432	\$6,842	\$7,806	\$7,668	\$6,936	67,58	\$7,998	\$8,931	\$10,200	\$11,233	\$12,322	\$12,038	\$12,084	\$12,024	\$11,777	\$11,832	\$9,857	\$8,508	\$8,373	\$6,013	0+7,10	\$8,336	\$7,030	\$6,232 \$8,228	\$7,168	\$6,747	\$8,656	\$7,891	\$10,807	\$11,086	\$11,696	\$11,585	\$12,012	\$11,400	\$12,909	\$10,826	\$12,555	\$12,680	\$11,112	\$10,882	\$10,983	
a Z	RSFPP	80	\$0	Q 98	80	80	80	80	Q. 9	80	80	08 08 08	80	08	0\$ 80	80	80	S S	80	\$1,204	S S	80	\$0	40,00	80	80	\$2,052 \$0	80	\$0	\$4,209 \$0 \$0	80	\$4.150	80	\$5,898 \$0	\$2,088	\$5,263	\$1,419	\$4,000	\$3,428	\$2,761	\$3,168 \$2,630	\$1,910	\$4,715	\$3,735	1 1 . 6 2
	Death on Active Duty	\$6,741	\$8,600	\$8,432	\$6,872	\$7,799	\$7,755	\$6,953	\$7.787	\$8,107	\$9,208	\$10,617	\$11,654	\$12,850	\$12,144	\$12,615	\$12,512	\$13,066	\$5,403	\$5,276	\$4,983	\$4,941	\$4,322	13053	\$4,939	\$4,627	\$5,299 \$4,856	\$4,954	\$5,442	\$6,674	\$6,774	\$8,006	\$10,345	\$9,573	\$11,195	\$13,617	\$12,523	\$14,714	\$12,525	\$16,449	\$14,626	\$16,326	\$17,696	\$18,348	
	Minimum Income	80	80	9 9	80	80	80	80	g 9	808	80	9 S	80	08	80	80	\$0	<u> </u>	\$0 \$0	80	S S	80	S S	08	80	80	80 80	80	80	\$0 8	80	S S	80	9 S	80	08 8	80	80	0S S	80	\$0 \$0	80	S S	S S	ŀ
Avera	RCSBP	\$10,675	80	0 9 9	80	\$0	\$10,728	\$1,392	67,140	\$1,392	\$4,242	\$6,147 \$5,440	\$4,719	\$7,460	\$8,083	\$9,604	\$8,501	\$6,820	\$3,483	\$9,529	\$2,736	\$4,565	\$6,850	50,505	\$6,678	\$9,483	\$8,450 \$5,819	\$6,955	\$6,818	\$6,218	\$7,039	\$8,628	\$7,161	\$8,832	\$8,674	\$7,336	\$7,769	\$7,722	\$7,554	\$7,982	\$7,930 \$8,130	\$7,862	\$8,291	\$7,645	1
	SBP	\$23,476	\$9,558	\$5.244	\$3,315	\$8,736	\$4,103	\$6,571	\$5,100	\$6,641	\$6,660	\$7,782 \$9,582	\$11,222	\$12,261	\$12,306	\$12,119	\$12,284	\$12,408	\$18,014	\$12,567	\$13,080	\$15,214	\$11,177	\$10,033	\$13,659	\$11,991	\$8,547 \$14,204	\$11,497	89,800	\$11,940	\$9,840	\$13,196	\$12,896	\$13,349	\$12,510	\$12,796	\$12,429	\$14,256	\$11,546	\$13,563	\$14,285 \$11,107	\$11,811	\$11,219	\$11,729	
,EI	Total	35	23	102	243	144	335	840	086	801	743	898 546	564	344	261 261	203	82	75	40	108	L9 56	107	121	101	154	195	170 229	202	202	227	188	243 243	273	269	301	386	522	587	623	859	1,102	1,105	1,324	1,715	
	RSFPP	0	0	0 0	0	0	00	00	0 0	0	0	00	0	00	0	0	0	00	0	-	00	0	0 ,	۷ ۵	0	0	- 0	0	0 (7 0	0	0 6	0	e 0	_	m	4 4	17	∞ ч	18 0	32	5	7	91 9	
	Death on Active Duty	15	21	101	241	143	327	816	934	745	664	4.4 4.4	406	215	120	77	39	30	15	34	34	. A	88	107	± 98	130	119	126	134	122	104	8 8	106	76 111	87	86 8	120	109	110	8 2	105	83	66 1	89	:
	Minimum Income	0	0 0	0 0	0	0 0	0	00		0	0	0 0	0	00	00	0	0	0 0	0	0	0 0	0	00		0	0	0 0	0	0	00	0	00	0	00	0	0 0	0 0	0	0 0	00	00	0	00	00	
	RCSBP	S	0	00	0	0	† 0				7 ;	9		22 %			∞ ₹	7	4	=	e 0	7	s 0		10	4	9																	426	
	SBP	15	2 0	0 -	2	- 2	2 ∞	23	45	55	77	93	132	107	129	108	35	38 68	21	62	30	36	28	7 %	S S	61	45 82	65	57	87	19	129	128	160	173	219	303	359	382	575	737	739	862 1.005	1,184	1
	Age	0	- (7 6	4	S	0 1	∞ ≎	, 91	= =	12	13	15	16	18	19	20	22	23	24	25	27	28	67 08	31	32	33 34	35	36	38	39	0 4 4	42	£ 4 4 4	45	46	4 4	46	50	52	53	55	56 57	28 28	i

	Total	\$10,507	\$10,633	\$10,587	\$10,138	\$10,364 \$10,591	\$10,411	\$10,462	\$10,853	\$11,108	\$11,209	\$11,282	\$11,721	\$12,031	\$12,320	\$13,024	\$13,120	\$14,016	\$14,208	\$14,516	\$15,674	\$16,286	\$16,523	\$16,578 \$16,548	\$16,561	\$16,356	\$15,738	\$15,079	\$15,982	\$25,826 \$6,014	80	80	\$0 80		\$12,231	
Z	RSFPP	\$1,840 \$2,805	\$5,418 \$6,379	\$2,272	\$2,080	\$4,470 \$3,140	\$3,175	\$1,328	\$2,421 \$2,140	\$2,419	\$2,302 \$2,492	\$2,213	\$1,978	\$2,340	\$2,493	\$2,599	\$2,416	\$2,825	\$2,771	\$2,860	\$3,258	\$3,587	\$3,148	\$3,988 \$4,249	\$3,735	\$4,755	\$2,522	\$3,585	80	\$0 \$1,935	80	2 S	\$000		\$2,989	
	Death on Active Duty	\$16,794	\$18,796	\$17,065	\$14,407	\$14,810 \$15,684	\$13,191	\$13,816	\$11,906	\$10,432	\$12,267	\$10,035	\$12,238	\$12,314	\$12,125	\$14,885	\$11,718	\$13,379	\$10,265	\$7,941	\$9,866	\$8,342	\$6,173	\$7,588 \$4,350	\$4,393	\$3,070	\$3,070	08	0 S	0S 0S	80	è &	\$0 80 80		\$9,760	
	Minimum Income	80 80 80 80	80 80 80	0\$	80	0\$ 80	87,998	\$8,825	% % %	08	80	\$8,825	\$8,825	\$7,982	\$7,655	\$6,707	\$7,235	\$8,825	\$7,816	\$8,825	\$8,825	\$8,788	\$7,169	\$0 \$7,880	0\$	\$7,146	08 80	80	800	\$0 \$8,561	80	2 S	\$0 80		\$8,130	
Aver	RCSBP	\$8,062 \$7,649	\$7,808 \$7,808 \$7,854	\$7,665	\$7,539	\$7,662 \$7,517	\$7,608	\$7,720	\$7,870 \$7,843	\$7,907	\$8,077	\$7,838	\$7,995	\$8,174	\$8,141 \$8,344	\$8,436	\$8,449	\$8,879	\$8,981	\$9,214	\$9,512	\$9,705	\$9,926	\$10,564 \$10,404	\$10,884	\$10,676	\$10,858	\$11,390	\$10,662	\$14,544 \$0	80	2 S	\$0		\$8,319	
	SBP	\$11,195	\$11,604	\$11,839	\$11,509	\$11,757	\$11,996	\$12,382	\$12,344 \$12,392	\$12,576	\$12,582	\$12,640	\$13,163	\$13,260	\$13,934	\$14,862	\$15,202	\$16,422	\$17,052	\$17,557	\$19,556 \$19,743	\$20,627	\$21,288	\$21,488 \$22,508	\$21,224	\$21,468	\$20,692	\$19,301	\$17,046	\$28,647	\$0	2 S	\$0		\$14,231	
İ	Total	2,149	3,056	3,901	4,882	5,425 5,968	6,664	8,375	6,958 7,881	8,934	9,913	10,383	11,764	12,319	12,838	11,841	12,028	10,463	8,421	7,468	6,340	4,865	3,737	2,057 1,240	716	235	81	43	12	s so	0	0 0	00	;	321,404	
ľ	RSFPP	8 47 2	t∞ ~	15	2 ∞	9 11	13	3.4	10	∞ [18	36 41	36	107	126 178	202	292	321	283	312	282 260	243	160	117	45	12 30	y 60	4 0	0 7	2 0	0	> 0	00		4,636	
	Death on Active Duty	84 7 7 8	9 9	69	65	99 19	51	53	46 51	51	92 22	51 63	43	81 ×	58 72	69	89 5	S & 8	59	47	46	29	E E :	15 16	9 7	t 61 6	s	0 0	0	0 0	0	> 0	00	;	13,668	
	Minimum Income	000	000	00	00	00	- 0	1 0	0 0	0 0	0 0	- 0	2.5	3 6	\$ 6	2	- 0	0 - 0	ı vo	m m	0.0	3	0 0	2	0 0	7 — 0	00	0 0	0	0 -1	0	٥ د	00	;	51	
	RCSBP	598 732 833	894 1,140	1,222	1,714	1,885	2,395	2,736	2,292 2,495	2,767	2,865	3,007	3,195	3,132	3,304	2,998	3,119	2,737	2,411	2,157	1,946	1,485	1,193	718 462	237	88 3	9 2 8	15	7 7	- 0	0	> 0	00		815,68	
	SBP	1,459	2,088	2,595	3,095	3,468	4,204	5,400	4,610 5,324	6,108	7,003	7,465	8,488	8,996 8,996	9,345	8,570	8,548	7,351	5,663	4,973	4,064	3,075	2,304	1,207	428	132	49	24	10	4 6	0 0	0 0	00	;	213,531	,
	Age	99 59	8 4	99	67	89	70	72	73	75	77	78	80	82	83	85	86	. o o	6	91	93	95	96	86	100	102	103	105	107	108	110	112	113	i	Total 60+	

Age is survivor's current age nearest birthday at end of liscal year.

60 is is total for ages 60 and over.

62 is total for ages 62 and over.

65 is total for ages 65 and over.

65 is total for ages 65 and over.

10 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.

Children of the same survivors, whether on not the reserve retiree elected RCSBP.

Pay amounts do not include the 12/1/18 cost of living increase of 2.8%.

Amounts do not include the receive survivor benefits as part of Special Survivor Indemnity Allowance (NDAA 2008, P.L. 111-31, and 115-91).

APPENDIX D

ECONOMIC ASSUMPTIONS

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Wage Growth	91
Table D-1: DoD Board of Actuaries' Long-Term Economic Assumptions	93

ECONOMIC ASSUMPTIONS

In July 2018, the DoD Board of Actuaries approved the following economic assumptions for use in the valuation as of September 30, 2018: the rate of inflation (CPI) is assumed to be 2.75 percent per year; the investment return (interest rate) is 5.00 percent per year; and the basic pay scale increases are 3.25 percent per year. For access to the official transcript of the meeting, follow this link: https://actuary.defense.gov/External-Links/

As noted in the "Valuation Data and Procedure" section in the main text, the valuation results are highly sensitive to changes in these three primary economic assumptions. As background for approving the economic assumptions, the Board receives information from economists and actuaries and is provided with extensive historical data on inflation, interest rates, and wage growth. The Board analyzes past trends, current environment, and future expectations. As part of their assessment of the current environment, the Board also considers what other federal retirement and social insurance systems are assuming as well as other government agencies and financial experts. Table D-1 shows the DoD Board of Actuaries' approved long-term economic assumptions by valuation year since the Fund's inception in 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. There are differences 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 (BLS), 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 29 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 93 percent of the U.S. population). The CPI-W is the common index used to make cost-of-living adjustments for labor contracts.

The DoD assumption for CPI is reasonably consistent with what is used in other parts of the government. In its 2018 report, the Civil Service Retirement System (CSRS) assumes a 2.50 percent CPI increase. The Trustees of the Social Security Administration (SSA) in their 2018 Annual Report made projections under three alternative sets of assumptions. Their intermediate assumption for CPI was 2.6 percent (other assumptions: low cost -3.2 percent; high cost -2.0 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 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.

After analyzing past trends and forecasts of government trust fund earnings, 2.25 percent was adopted as the assumed rate of 'real' interest. Since 2.75 percent had been adopted as the inflation rate, the assumed nominal rate of interest is 5.00 percent (5.00 = 2.25 + 2.75). This is commonly known as the "building block method" in setting actuarial assumptions.

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 2.7 percent in their 2018 report (other assumptions: low $\cos t - 3.2$ percent; high $\cos t - 2.2$ percent). The Board of Actuaries of the CSRS used a 1.75 percent real interest rate assumption in its 2018 valuation.

Wage Growth

For the salary increase assumption, recent historical data is used as well as expectations for the future. 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 looks 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. ("Wages and Salaries" account for about 70 percent of the broader "Compensation" costs, with "Benefits" making up the remaining 30

percent.) 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.

In making its recommendation for the 'real' rate of the annual basic pay scale increase, the Board considered information presented and approved a 'real' basic pay growth assumption of 0.50 percent, leading to a nominal growth of 3.25 percent (3.25 = 0.50 + 2.75). The Board of Actuaries of the CSRS assumed 0.25 percent 'real' wage growth for its 2018 valuation. The Social Security Trustees' 2018 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 which excludes merit and certain longevity increases, whereas for Social Security, wage increase generally relates to the total salary 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
2011	3.00	5.75	3.75	2.75	0.75
2012	3.00	5.50	3.50	2.50	0.50
2013	3.00	5.50	3.50	2.50	0.50
2014	3.00	5.50	3.50	2.50	0.50
2015	2.75	5.25	3.25	2.50	0.50
2016	2.75	5.25	3.25	2.50	0.50
2017	2.75	5.00	3.25	2.25	0.50
2018	2.75	5.00	3.25	2.25	0.50

- NOTES:

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

APPENDIX E

NORMAL COST WEIGHTING FACTORS

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Table E-1: Basic Payroll Percentage Distribution by Completed Years of Service	96

NORMAL COST WEIGHTING FACTORS

There are four different retirement benefit formulas that apply to different populations within the Military Retirement System¹. (See Appendix A for a discussion of *Final Pay*, *High-3*, *CSB/Redux*, *and BRS* 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 year².

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 reasonable results.

Current rates were created using 2010 data. Table E-1 displays the active duty and reserve basic payroll percentage distributions by completed years of service at the end of FY 2010.

¹ The Blended Retirement System (enacted in NDAA 2016) is the fourth tier, effective January 1, 2018, for those who enter military service on or after January 1, 2018, or opt-in with fewer than 12 years of service during the one-year open season starting January 1, 2018. NDAA 2016 also sunsets CSB/Redux and repeals all aspects of BBA 2013 (reduced annual cost-of-living adjustments for "working age" retirees), as amended.

² For BRS, assumptions for the proportions of eligible members who will "opt-in" to the new plan are also needed. These assumptions are shown in Appendix F.

TABLE E-1

BASIC PAYROLL PERCENTAGE DISTRIBUTION
BY COMPLETED YEARS OF SERVICE

Completed	Percentage of Payroll on 9/30/2010:						
Years of							
Service	Full-time	Part-time					
0	3%	0.5%					
1 or less	8%	6%					
2 or less	13%	11%					
3 or less	18%	16%					
4 or less	24%	20%					
5 or less	28%	24%					
6 or less	32%	27%					
7 or less	37%	31%					
8 or less	41%	35%					
9 or less	45%	38%					
10 or less	49%	41%					
11 or less	53%	44%					
12 or less	56%	46%					
13 or less	59%	49%					
14 or less	63%	51%					
15 or less	66%	53%					
16 or less	68%	55%					
17 or less	71%	58%					
18 or less	75%	60%					
19 or less	78%	64%					
20 or less	81%	67%					
21 or less	84%	70%					
22 or less	86%	74%					
23 or less	89%	77%					
24 or less	91%	80%					
25 or less	93%	83%					
26 or less	95%	86%					
27 or less	96%	89%					
28 or less	97%	91%					
29 or less	98%	93%					
30 or less	98%	94%					
31 or less	99%	95%					
32 or less	99%	96%					
33 or less	99%	97%					
34 or less	100%	98%					
35 or less	100%	98%					
36 or less	100%	99%					
37 or less	100%	99%					
38 or less	100%	100%					
39 and greater	:::	:::					
TOTAL FORCE	100%	100%					

Figures are assumed to represent fiscal year payroll proportions by year of entry. For example, for full-time members 3% of payroll in a fiscal year is assumed to apply to members who entered in that fiscal year; 8% of payroll is assumed to apply to members who entered in that fiscal year or the year prior; etc.

APPENDIX F

VALUATION PROGRAM PARAMETERS

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Table F-1: Active Duty	99
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VALUATION PROGRAM PARAMETERS DESCRIPTION

GORGO is an actuarial projection model run in a spreadsheet environment with embedded Visual Basic programming. The purpose is to simulate future cash flows impacting the Military Retirement Fund. The model is used to compute the aggregate entry-age normal cost percentage, unfunded liability, and make long-term projections; in some cases slight adjustments to GORGO cash flow projection are made outside of GORGO. In addition to being affected by the decrement rates, GORGO has a number of parameters which affect its results. These parameters are generally summaries of recent experience and/or future expectations. 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 major valuation program parameters is given in Table F-1. The table is organized by population group with the economic factors reproduced for user convenience. Numerical values are also shown for selected items. To keep this report manageable and prevent unintentional misuse, other parameters not described as well as numerical values not shown in the table may be requested if needed.

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 duty members.

An 11th parameter specifies the percentage increase for subsequent years. The value for the

valuation is 3.25 percent.

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 2.75 percent.

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 5.00 percent.

4) Lump Sum Discount Rate A parameter that specifies the assumed annual

interest rate (in real economic terms) used to calculate BRS lump sums. The value for the

valuation is 7.3%.

Active Duty

<u>Item</u> <u>Description/Value</u>

1) Member Election of Spouse or This gives the percentage of members by age, Spouse/Child SBP Coverage officer/enlisted status, and Career Status Bonus (CSB)

election status who have elected spouse or

spouse/child coverage under the Survivor Benefit Plan

(SBP).

Item

Description/Value

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, benefit tier, 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, benefit tier, 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, 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.

Item

Description/Value

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 percent 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, officer/enlisted status, and benefit tier.
- 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 10 percent. 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.

Item

Description/Value

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 radixes (i.e., notional starting populations) and pay of full- and part-time members. The value for the valuation is \$38,021.

10) Accumulated Value of Partial Pay 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.

11) BRS Opt-In Rates

Rates used to determine the portion of members with fewer than 12 years of service as of December 31, 2017, electing, during the calendar year 2018 Open Season, to opt-in to BRS. Varies by years of service and officer/enlisted. Rates are based on results from a RAND Corp. analytical model approved with adjustments by the Board. Separate rates are used for NCP weighting and census purposes to reflect timing differences in the respective modeling needs. Reservists are assumed to have opt-in rates equal to half of the active duty rates (i.e., multiply the below rates by 0.5).

	NCP	Ce	nsus
YOS	Off / Enl	Officer	Enlisted
0	100.0%	100.0%	100.0%
1	97.3%	85.0%	90.0%
2	89.3%	85.0%	90.0%
3	88.9%	80.0%	90.0%
4	85.1%	65.0%	80.0%
5	71.5%	50.0%	60.0%
6	52.6%	35.0%	40.0%
7	36.0%	25.0%	30.0%
8	26.1%	15.0%	20.0%
9	17.2%	10.0%	15.0%
10	12.2%	5.0%	10.0%
11	7.6%	5.0%	5.0%
12	3.8%	0.0%	0.0%
13+	0.0%	0.0%	0.0%

Item

Description/Value

12) BRS Lump Sum Election Rates

This is the rate of election of lump sums by those who are covered under BRS. The value is based on a study completed by an external organization and represents members having a "Low Personal Discount Rate and Aware of Tax and VA Offset Implications." It is an interpolated value for active duty using an assumed lump sum discount rate (used to calculate lump sums) of 7.3%; the assumptions are 5.2% for officers and 22.8% for enlisted. Of those who elect lump sums, all are assumed to elect the 50% lump sum option.

Reserve Duty

Item

Description/Value

- 1) 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 benefit tier.
- 2) Proportion of Points Based on Active Service
- This amount is used to allocate the part of the reserve normal cost that are paid for as a part of the active duty normal cost. The value for the valuation is 51%.

3) Initial Annual Pay of new Selected Reserve member

- This array is used to set initial pay for a new Selected Reserve member in a normal cost run. The values for the valuation are updated with an across-the-board salary increase each year.
- 4) 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) is 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 2024, and the transition to age 58 is assumed to occur in 2033. See also the 'Retiree Gain Statement' in Appendix K.

Item

Description/Value

5) Ratio of Reserve to Active Payroll

For the purposes of the allocation referred to in item 2) above, this value represents the assumed ratio of reserve duty to active duty basic payroll. The value for the valuation is 10%.

6) BRS Opt-In Rates

Rates used to determine the portion of members with fewer than 4,320 points as of December 31, 2017, opting into BRS during the calendar year 2018 Open Season. Varies by years of service and officer/enlisted. They are equal to ½ of the Opt-In Rates for Active Duty (Item 11).

7) BRS Lump Sum Election Rates

This is the rate of election of lump sums by those who are covered under BRS. The value is based on a study done by an external organization and represents members having a "Low Personal Discount Rate and Aware of Tax and VA Offset Implications." It is an interpolated value for reserves using an assumed lump sum discount rate (used to calculate lump sums) of 7.3%; the assumptions are 2.0% for officers and 8.4% for enlisted. Of those who elect lump sums, all are assumed to elect the 50% lump sum.

Retiree

<u>Item</u>

Description/Value

1) Retired Pay Adjustment Factors

Retired pay of current retirees is adjusted for VA compensation, SBP offset changes, and other non-COLA 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.

Item

Description/Value

2) Retired Pay Adjustment to Members With SBP Spouse Coverage

These factors model data that show mortality is better (or less), and non-death loss from paid status is generally higher, for those retired members who elect SBP spouse coverage. Rather than develop additional sets of mortality and loss rates, the respective retiree death and loss rates (Appendix I) are adjusted with these factors. This impacts retirees with SBP spouse coverage. The factors are given by active/reserve, disability/nondisability status, and officer/enlisted status.

Survivor

Item

Description/Value

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 retired pay. This is expressed as a percentage of net retired pay and is given by age, officer/enlisted status, benefit tier, 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.

<u>Item</u>	<u>Description/Value</u>
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.
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 non-COLA 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 \$1,319.

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. For the purposes of active duty rate development, full-time support reservists (excluding Army National Guard) are included in the underlying data.

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). As noted in the "Valuation Data and Procedure" section, as well as Table 6B, in the main text, the valuation results for active duty members and the full-time normal cost are sensitive to the withdrawal rates. 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, and the experience period intentionally excludes the significant downsizing of the early 1990s, which is not considered a representative basis upon which to develop long-run actuarial assumptions. Full-time reservist experience is included in the data used to develop the rates.

Active duty disability retirement rates were updated in a prior year's (September 30, 2015), valuation using an underlying experience period from FY 2010 – FY 2014 for years of service less than 19. These rates recognize the increase in disability retirements resulting from implementing the Integrated Disability Evaluation System (IDES, operated jointly by DoD and the VA since 2007), as well as a notable increase in combat-related disability retirements. The data available for study could not fully explain the reasons for the increased disability retirement experience (i.e., the inability to separate combat-related injuries by incidence year due to some backlogs created by moving to the IDES). In order to recognize this inherent uncertainty in the data, and also to acknowledge potential future improvements to reduce the severity of combat-related injuries and potential reductions to combat exposure, the Board agreed to remove half of the combat-related disabilities from the FY 2010 – FY 2014 experience period. However, the Board also agreed that OACT should add an additional amount of accrued liability to recognize the higher number of disability retirements expected in the near term (phased out over a four-year period) compared to what the new disability rates produce. This valuation includes the third year of the four-year period.

Generally, the decrement rates were graduated (smoothed) using Whittaker-Henderson graduations. The typical active duty career has inherent discontinuities at select points (reenlistment, promotion, retirement, etc.). Rates were separated into ranges where assumptions of continuity were reasonable. Where actual discontinuities exist, 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 age 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)

Deaths during year

[Number at beginning of year - ½ (withdrawals + nondisability retirements during year)]

NONDISABILITY RETIREMENT (by completed years of service)

New retirees during year Number at beginning of year

TEMPORARY DISABILITY RETIREMENT (by completed years of service)

New temporary disabilities during year

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

PERMANENT DISABILITY RETIREMENT (by completed years of service)

New permanent disabilities during year

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

WITHDRAWAL (by completed years of service)

Withdrawals during year Number at beginning of year

REENTRANT RATIOS (by completed years of service)

Number reentering during year Number at beginning of year

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS (by age nearest birthday)

New entrants during year
Total new entrants

PAYGRADE TRANSFER (by completed years of service)

Transfers to category during year

[Number at beginning of year - ½ (withdrawals + nondisability retirements during year)]

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

Average basic pay at next year of service using current year pay table

Average basic pay at current year of service

SUMMARY OF YEARS ON WHICH ACTIVE DUTY RATES ARE BASED

By Fiscal Year

RATE	<u>1982-1989</u>	1997-1999	2000-2008	2010-2014*	<u>2015</u>
Death				X	X
Nondisability Retirement	X	X	X		
Temporary Disability Retirement				x	
Permanent Disability Retirement				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		

^{*} In the construction of the disability-related rates, we removed one half of the combat-related disability retirements occurring during the the FY 2010 - FY 2014 experience period. This removal only affects rates less than 19 years of service. We subtracted additional disability retirements from withdrawals, thereby affecting withdrawal rates and not impacting the percentage making 20 year retirement.

DEATH RATES FOR NONRETIRED MILITARY

(AGE NEAREST BIRTHDAY)

Age	Officer	Enlisted
16	0.00049	0.00069
17	0.00048	0.00070
18	0.00047	0.00071
19	0.00046	0.00073
20	0.00045	0.00075
21	0.00044	0.00076
22	0.00044	0.00077
23	0.00043	0.00077
24	0.00043	0.00076
25	0.00043	0.00075
26	0.00042	0.00073
27	0.00042	0.00072
28	0.00041	0.00070
29	0.00041	0.00070
30	0.00041	0.00068
31	0.00040	0.00068
32	0.00041	0.00067
33	0.00040	0.00066
34	0.00040	0.00066
35	0.00040	0.00067
36	0.00041	0.00067
37	0.00041	0.00066
38	0.00042	0.00067
39	0.00042	0.00067
40	0.00043	0.00067
41	0.00043	0.00068
42	0.00044	0.00068
43	0.00045	0.00070
44	0.00046	0.00071
45	0.00049	0.00073
46	0.00051	0.00077
47	0.00053	0.00080
48	0.00057	0.00083
49	0.00061	0.00087
50	0.00065	0.00091
51	0.00069	0.00096
52 53	0.00074 0.00079	0.00100 0.00106
54	0.00079	0.00100
55 55	0.00089	0.00111
56	0.00089	0.00117
57	0.00101	0.00123
58	0.00101	0.00136
59	0.00108	0.00130
60	0.00114	0.00143
00	0.00121	0.00130

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)

Years of Service	Non- disability	Temporary Disability ***	Permanent Disability ***
0	0.00000	0.00022	0.00027
0	0.00000	0.00033	0.00037
1	0.00000	0.00064	0.00038
2	0.00000	0.00083	0.00074
3	0.00000	0.00091	0.00096
4	0.00000	0.00101	0.00087
5	0.00000	0.00095	0.00093
6	0.00000	0.00107	0.00154
7	0.00000	0.00112	0.00103
8	0.00000	0.00115	0.00152
9	0.00000	0.00103	0.00171
10	0.00000	0.00105	0.00153
11	0.00000	0.00098	0.00135
12	0.00000	0.00090	0.00148
13	0.00000	0.00080	0.00175
14	0.00000	0.00080	0.00154
15	0.00000	0.00077	0.00159
16	0.00000	0.00069	0.00202
17	0.00000	0.00059	0.00224
18	0.00000	0.00048	0.00204
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, particularly 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 to reflect recent trends.

NONDISABILITY, TEMPORARY DISABILITY & PERMANENT DISABILITY RETIREMENT RATES

ENLISTED (BY COMPLETED YEARS OF SERVICE)

Years of Service	Non- disability	Temporary Disability ***	Permanent Disability ***
0	0.00000	0.00107	0.00054
0	0.00000	0.00187	0.00054
1	0.00000	0.00307	0.00179
2	0.00000	0.00383	0.00291
3	0.00000	0.00450	0.00382
4 5	0.00000	0.00430	0.00396
6	0.00000	0.00422	0.00425
	0.00000	0.00415	0.00497
7 8	0.00000	0.00440	0.00521
	0.00000	0.00441	0.00614
9	0.00000	0.00448	0.00645
10	0.00000	0.00429	0.00688
11	0.00000	0.00423	0.00776
12	0.00000	0.00398	0.00757
13	0.00000	0.00387	0.00785
14	0.00000	0.00380	0.00737
15	0.00000	0.00281	0.00749
16	0.00000	0.00186	0.00601
17	0.00000	0.00132	0.00492
18	0.00000	0.00075	0.00352
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, particularly 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 to reflect recent trends.

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

OFFICERS (BY COMPLETED YEARS OF SERVICE)

Years of Service	Withdrawal	Reentrant ***	Net Loss
0	0.01505	0.11027	0.10140
0	0.01797	0.11937	-0.10140
1	0.02185	0.03298	-0.01113
2	0.07016	0.02574	0.04442
3	0.12152	0.02898	0.09254
4	0.10811	0.01964	0.08847
5	0.09269	0.01703	0.07566
6	0.09609	0.01444	0.08165
7	0.08410	0.01400	0.07010
8	0.07614	0.01200	0.06414
9	0.06734	0.01155	0.05579
10	0.06538	0.00872	0.05666
11	0.05271	0.00798	0.04473
12	0.03476	0.00656	0.02820
13	0.02376	0.00557	0.01819
14	0.01562	0.00467	0.01095
15	0.00947	0.00368	0.00579
16	0.00629	0.00291	0.00338
17	0.00326	0.00252	0.00074
18	0.00122	0.00246	-0.00124
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. For this reason, the above rates should not be used for other purposes.

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

ENLISTED (BY COMPLETED YEARS OF SERVICE)

Years of Service	Withdrawal	Reentrant ***	Net Loss
0	0.10397	0.03043	0.07354
1	0.10110	0.00769	0.09341
2	0.18122	0.01394	0.16728
3	0.35270	0.02745	0.32525
4	0.15681	0.01394	0.14287
5	0.15456	0.01128	0.14328
6	0.11141	0.00966	0.10175
7	0.12239	0.00918	0.11321
8	0.09056	0.00761	0.08295
9	0.08561	0.00682	0.07879
10	0.05092	0.00540	0.04552
11	0.04076	0.00453	0.03623
12	0.03078	0.00347	0.02731
13	0.01845	0.00282	0.01563
14	0.01548	0.00223	0.01325
15	0.00712	0.00188	0.00524
16	0.00476	0.00154	0.00322
17	0.00314	0.00145	0.00169
18	0.00157	0.00139	0.00018
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. For this reason, the above rates should not be used for other purposes.

PERCENTAGE DISTRIBUTION OF NEW ENTRANTS

(AGE NEAREST BIRTHDAY)

Age	Officers	Enlisted	Total
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	0.00000
Total	0.06352	0.93648	1.00000

PAYGRADE TRANSFER RATES

STATUS (BY COMPLETED YEARS OF SERVICE)

Years of	Officer to	Enlisted to
Service	Enlisted	Officer
0	0.00042	0.00304
1	0.00010	0.00096
2	0.00006	0.00112
3	0.00013	0.00112
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

PROMOTION AND MERIT BASIC PAY INCREASE SCALES

OFFICERS (BY ENTRY AGE)

Years of						Entry Age					
Service	16	17	18	19	20	21	22	23	24	25	26
_	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
9	1.03943	1.03943	1.03943	1.03943	1.03943	1.03943	1.03943	1.04289	1.03995	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
~	1.03290	1.03290	1.03290	1.03290	1.03290	1.03290	1.03290	1.04169	1.03766	1.04233	1.04014
6	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	96286.0	96286.0	0.98796	962860	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						Entry Age					
Service	16	17	18	19	20	21	22	23	24	25	76
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	1.03727	1.03777	1.03740	1.03826	1.03842	1.03976	1.04040	1.03887
9	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
6	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	0.9666.0	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.

APPENDIX H

RESERVE DUTY RATES

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RESERVE DUTY RATES DESCRIPTION

Modeling reserves is similar in some respects to modeling active duty. There are, however, additional challenges due to the complexities of the reserve career (multiple breaks in service of varying durations, movement between active and reserve components, etc.); the structure of the reserve force; limitations of the reserve data; and evolving changes in how the reserves are used.

Reserves are modeled in two population categories in the portion of their career prior to receiving retired pay – Selected Reserves and non-Selected Reserves with 20 good years. The Selected Reserves include only part-time members (full-time Reservists are included in the active-duty (full-time) portion of this valuation) and are the reservists for whom normal costs are paid. The non-Selected Reserves with 20 good years¹ are modeled because they have enough service to qualify for retirement.

The reserve rates consist primarily of decrement rates related to the probabilities of a member leaving a category of military service for a specific reason. In addition, they include a new entrant distribution; a set of reentrant ratios; ratios for promotion and merit pay increases; average points per year; transfer to 20-year non-Selected Reserve status; and blow-up² factors. The decrement rates are mainly given by age nearest birthday at entry and completed years of service since Pay Entry Base Date (PEBD), for officers and enlisted separately. "Entry Age" is constructed on an assumption of no breaks in service; e.g., an "entry age" of 57 could represent a member who started at a much earlier age with a long break in service. As noted in the "Valuation Data and Procedure" section, as well as Table 6B, in the main text, the valuation results are highly sensitive to the separation rates and reentrant ratios³. Below is a description of the rates used in the reserve valuation process.

This includes the category commonly referred to as the "grey area" as well as other non-Selected Reservists with 20 qualifying retirement years.

These are used to adjust for persistent patterns of actual outcomes not conforming to expectations based on known data. For example, some new reserve retirees show up in the data each year who were not in the data as eligible-to-retire reservists the year before. The need for such "blow up" factors is one of many challenges in modeling reservists.

Another challenge in modeling reserves relates to the fact that many reservists start their career in the active duty component or have breaks in service throughout their career. Their movements back into the Selected Reserves (from the active duty component, from civilian status, etc.) are modeled as implicit flows via reentrant ratios. However, in some cases these ratios are unusually high, and population cells with small numbers of members initially are then augmented throughout the actuarial projection by large numbers of reentrants. This creates the potential for volatility of results, to the extent small population cell counts experience variations over time. Additionally, patterns of reservist population flows (between the Selected Reserves and the active duty component and between civilian status and the Selected Reserve) are changing, given external and internal factors such as changes in how reserves are used by the military.

The data for the rates was taken from the Reserve Component Common Personnel Data System (RCCPDS) files as of September 30 for the years 2005 through 2009, generally. The experience period was selected such that the sum of the part-time Selected Reserve force size changes for the included period was near zero. The fiscal years on which the rates are based is given on a subsequent page. A summary qualitative description follows in the below text, in addition to being displayed at the bottom of the respective rate tables in this appendix. The general formula derivation is similar to those of the Active Duty rates (Appendix G) and Retiree/Survivor rates (Appendix I). The reserve rate formulas are not shown, but may be requested from the Office of the Actuary.

The separation rates give the probability that a member in a given status at the beginning of the fiscal year leaves that status during the fiscal year. Separation rates from the Selected Reserve include standard losses, transfers to active duty, transfers to the full-time reserves, discharge, and death. 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.

A reentrant is defined as someone who is in the Selected Reserves at year end, who was not in the same status a year earlier, and who is not a new entrant (as defined by having greater than zero completed years of PEBD service). It can include transfers from active duty; former Selected Reserve or active members returning after breaks in service; reserve members returning after being attached to a non-selected reserve component (Individual Ready Reserve or Inactive National Guard); and members transferring to the part-time Selected Reserves from the full-time reserves.

The new entrant distribution gives the percentages of new entrants (as defined by having zero completed years of PEBD service) to the part-time Selected Reserves by age and by officer/enlisted status. The distribution is only used in the normal cost (new entrant) valuation and the open group projection.

Due to Public Law (P.L.) 110-181 (see Appendix A), the set of separation rates shown apply only in the early years of the projection, and then phase in to an average age of 58 for reserve retirement. (See Item 4 in the Reserve Duty section in Appendix F for a description of the parameter used to model the phase-in.) As the transitions to earlier average retirement ages occur, the ages applicable to some of the rates change.

In most cases the separation and reentrant rates and ratios are not smoothed (graduated). However, cells with numerators of fewer than 10 cases are combined with other cells.

The promotion and merit increase scales (PAMS) 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 PAMS are defined by length of PEBD service, by age, and by officer/enlisted status. They are computed by dividing the average pay at age (x+1), years of service (y+1) by the average pay at age (x), years

of service (y) one year earlier. An adjustment is made to compute the averages for the numerator and denominator based on the same pay table, and cells based on few observations are combined with other cells.

SUMMARY OF YEARS ON WHICH RESERVE RATES ARE BASED

By Fiscal Year

<u>RATE</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	2009	2010-2014*	<u>2015</u>
New Entrant Distribution (Officer/Enlisted)	X	X	X	X	X		
Death (Officer/Enlisted; Selected/Non-Selected)						х	X
Separation* (Officer/Enlisted; Selected/Non-Selected)	X	X	X	X	X		
Reentrant (Officer/Enlisted; Selected)	X	X	X	X	X		
Paygrade Transfer (Officer/Enlisted; Selected)	X	X	X	X	X		
Status Transfer (Officer/Enlisted; Selected-to- Non-Selected)	X	X	X	X	X		
Retirement (Officer/Enlisted; Selected/Non-Selected)	X	X	X	X	X		
Disability Retirement (Permanent/Temporary; Officer/Enlisted; Selected)						X	
Average Points Per Year (Officer/Enlisted; Selected/Non- Selected)	Х	X	X	х	X		
Career Points Adjustment (Officer/Enlisted; Selected)	X	X	X	X	X		
Reentering Average Points (Officer/Enlisted; Selected)	X	X	X	X	X		
Retirement Ratios (Officer/Enlisted; Non-Selected)	X	X	X	X	X		
Transfer Ratios (Officer/Enlisted; Selected-to- Non-Selected)	X	X	X	X	X		
Transfer Ratio Adjustment (Officer/Enlisted; Selected-to- Non-Selected)	X	X	x	x	X		
Selected Reserve PAMS (Officer/Enlisted)	Х	X	X	х	X		
Non-Selected Reserve PAMS (Officer/Enlisted)	X	X	X	X	X		

^{*} In the construction of the disability-related rates, we removed one half of the combat-related disability retirements occurring during the FY 2010-2014 experience period. We subtracted additional disability retirements from separations, thereby affecting separation rates and reducing the impact on the percentage making 20 year retirement. The adjustment did not impact Officer Temporary Disability Rates.

New Entrant Distribution

By Paygrade (Officer/Enlisted)

F---4-----

Entry Age	Officer	Enlisted	Total
17	0.00000	0.02350	0.02350
18	0.00000	0.19427	0.19427
19 20	0.00001 0.00018	0.20176 0.14591	0.20177 0.14609
21	0.00018	0.10208	0.14009
21	0.00020	0.10200	0.10250
22	0.00072	0.07088	0.07160
23	0.00149	0.05248	0.05397
24	0.00107	0.03949	0.04056
25	0.00074	0.03018	0.03092
26	0.00069	0.02308	0.02377
27	0.00071	0.01890	0.01961
28	0.00063	0.01535	0.01598
29	0.00061	0.01341	0.01402
30 31	0.00070 0.00064	0.01077	0.01147 0.00989
31	0.00064	0.00925	0.00989
32	0.00052	0.00773	0.00825
33	0.00055	0.00687	0.00742
34	0.00054	0.00607	0.00661
35	0.00067	0.00633	0.00700
36	0.00048	0.00518	0.00566
37	0.00054	0.00474	0.00528
38	0.00000	0.00000	0.00000
39	0.00000	0.00000	0.00000
40	0.00000	0.00000	0.00000
41	0.00000	0.00000	0.00000
42	0.00000	0.00000	0.00000
43	0.00000	0.00000	0.00000
44 45	0.00000	0.00000	0.00000
45 46	0.00000 0.00000	0.00000 0.00000	0.00000 0.00000
40	0.00000	0.00000	0.00000
47	0.00000	0.00000	0.00000
48	0.00000	0.00000	0.00000
49 50	0.00000	0.00000	0.00000
50 51	0.00000 0.00000	0.00000 0.00000	0.00000 0.00000
31	0.00000	0.00000	0.00000
52	0.00000	0.00000	0.00000
53	0.00000	0.00000	0.00000
54	0.00000	0.00000	0.00000
55	0.00000	0.00000	0.00000
56	0.00000	0.00000	0.00000
57	0.00000	0.00000	0.00000
58	0.00000	0.00000	0.00000
59	0.00000	0.00000	0.00000
60	0.00000	0.00000	0.00000
61 >62	0.00000 0.00000	0.00000 0.00000	0.00000 0.00000
~ 02	0.00000	0.00000	0.00000
Total	0.01177	0.98823	1.00000

DESCRIPTION: New Entrant distribution for a normal cost valuation (as well as open group), where a new entrant is defined as: a part-time selected reserve on the file as of year-end, who was not in that status in the prior year, and has zero completed PEBD years of service.

> Arrayed by entry age and paygrade (officer/enlisted). Populates age scatter of new entrant cohort. Model assumes no new entrants older than age 37.

Reserve Death Rates

By Reserve Status and Paygrade

	Selec	cted	Non-Se	lected
Age	Officer	Enlisted	Officer	Enlisted
16	0.00029	0.00047		
17	0.00029	0.00053		
18	0.00029	0.00060		
19	0.00029	0.00069		
20	0.00029	0.00069		
20	0.00029	0.00075		
21	0.00029	0.00079		
22	0.00028	0.00082		
23	0.00029	0.00083		
24	0.00029	0.00081		
25	0.00029	0.00079		
26	0.00030	0.00075		
27	0.00030	0.00072		
28	0.00031	0.00070		
29	0.00032	0.00069		
30	0.00032	0.00068	0.00024	0.00046
31	0.00033	0.00068	0.00025	0.00045
32	0.00034	0.00069	0.00026	0.00045
33	0.00035	0.00067	0.00026	0.00045
34	0.00035	0.00066	0.00026	0.00044
35	0.00036	0.00066	0.00027	0.00043
36	0.00037	0.00066	0.00028	0.00042
37	0.00037	0.00065	0.00028	0.00042
38	0.00038	0.00066	0.00029	0.00042
39	0.00038	0.00067	0.00029	0.00042
40	0.00039	0.00069	0.00029	0.00043
41	0.00039	0.00072	0.00030	0.00053
42	0.00040	0.00074	0.00030	0.00064
43	0.00041	0.00077	0.00036	0.00073
44	0.00041	0.00077	0.00040	0.00073
45	0.00042	0.00078	0.00045	0.00093
43	0.00043	0.00079	0.00043	0.00093
46	0.00045	0.00079	0.00050	0.00102
47	0.00046	0.00080	0.00056	0.00112
48	0.00049	0.00080	0.00062	0.00124
49	0.00051	0.00081	0.00070	0.00137
50	0.00053	0.00082	0.00079	0.00153
51	0.00056	0.00085	0.00090	0.00171
52	0.00058	0.00089	0.00104	0.00192
53	0.00060	0.00097	0.00122	0.00220
54	0.00064	0.00107	0.00146	0.00254
55	0.00066	0.00120	0.00175	0.00295
56	0.00069	0.00135	0.00212	0.00349
57	0.00072	0.00153	0.00258	0.00416
58	0.00075	0.00173	0.00314	0.00500
59	0.00078	0.00196	0.00379	0.00597
60	0.00080	0.00222	0.00448	0.00699
61	0.00083	0.00250	0.00519	0.00803
62	0.00085	0.00281	0.00590	0.00904
63	0.00087	0.00316	0.00660	0.01004

DESCRIPTION: Reserve Death Rates

Arrayed by reserve status (Selected/Non-Selected), age (nearest birthday), and paygrade (officer/enlisted).

Probability that a member dies in the next year. Should not be compared to other published rates or used for other purposes without examining how they are derived.

Officer Selected Reserve Separation Rates (Non-Retirement Causes)

	lo.l	0								
	2 >62	1.000								
	62	1:00								
	61	0.333 1.000								
	09	0.100								
	28	0.182 0.182 0.182 1.000								
	28	0.048 0.048 0.048 0.048	1.000							
	22	0.053 0.053 0.053 0.053 0.053	1.000							
	26	0.095 0.095 0.095 0.095	0.095							
	22	0.106 0.106 0.106 0.106	0.106 0.106 1.000							
	54	0.099 0.099 0.099 0.099	0.099 0.099 0.099 1.000							
	53	0.094 0.094 0.094 0.094 0.094	0.094 0.094 0.094 0.094 0.094	1.000						
	52	0.058 0.058 0.058 0.058	0.058 0.058 0.058 0.058	1.000						
	51	0.084 0.084 0.084 0.084	0.084 0.084 0.084 0.084	0.084 0.084 1.000						
	90	0.051 0.051 0.051 0.051	0.051 0.051 0.051 0.051	0.051 0.051 1.000						
	49	0.080 0.080 0.080 0.080 0.080	0.080 0.080 0.080 0.080 0.080	0.080 0.080 0.080 0.080 1.000						
	48	0.117 0.117 0.117 0.117	0.117 0.117 0.117 0.117	0.117 0.117 0.117 0.117	1.000					
	47	0.000 4.000	0.0000 20000 20000	20000 20000 20000	1.000					
	46	0.107 0.107 0.107 0.107	0.107 0.107 0.107 0.107	0.107 0.107 0.107 0.107	0.107					
	45	0.089 0.089 0.089 0.089	0.089 0.089 0.089 0.089	0.089 0.089 0.089 0.089	0.089 0.089 1.000					
	44	0.099	0.099 0.099 0.099 0.099	0.099 0.099 0.099 0.099	0.099					
	43	0.098	0.098	0.098 0.098 0.098 0.098	0.098	0.098				
	45	0.040 0.040 0.060 0.110 0.143	0.063	0.063	0.063 (0.0	0.063				
	41	0.036 0.036 0.069 0.135 0.083	0.063	0.063	0.063	0.063				
	40	0.064	0.062 0.086 0.081 0.059	0.060 0.117 0.067 0.040 0.040	0.040	0.040				
ny Age	38	0.039 0.039 0.065 0.113 0.084	0.119 0.089 0.091 0.124 0.087	0.091 0.072 0.042 0.042 0.042	0.042 0.042 0.042 0.042 0.042	0.042				
By Entry Age	38	0.079 0.082 0.068 0.070 0.070	0.130 0.053 0.157 0.152 0.175	0.049	0.049	0.049	0.049			
_	37	0.058 0.067 0.075 0.094 0.088	0.089 0.144 0.133 0.130	0.106	0.040	0.040	0.040			
	36	0.048 0.066 0.065 0.060	0.095 0.057 0.113 0.132 0.093	0.128 0.114 0.035 0.035 0.035	0.035	0.035	0.035			
	35	0.063 0.075 0.078 0.078	0.086 0.064 0.144 0.082 0.099	0.101 0.070 0.069 0.061	0.052 0.051 0.044 0.065 0.031	0.020 0.020 0.020 0.020	0.020			
	ਲ	0.050 0.050 0.089 0.065 0.071	0.090 0.074 0.134 0.112 0.083	0.101 0.094 0.078 0.036 0.064	0.040 0.037 0.047 0.047 0.039	0.039 0.037 0.017 0.017	0.017			
	33	0.063 0.077 0.078 0.079 0.053	0.048 0.058 0.115 0.097	0.088 0.086 0.123 0.086 0.096	0.065 0.031 0.030 0.031 0.046	0.020 0.029 0.020 0.020 0.020 0.020 0	0.029	0.029		
	32	0.064 0.094 0.088 0.073	0.101 0.076 0.170 0.158 0.049	0.118 0.075 0.076 0.073 0.035	0.057 0.058 0.047 0.028 0.054	0.024 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028		
	31	0.065 0.079 0.081 0.086 0.100	0.065 0.101 0.116 0.189 0.087	0.102 0.091 0.090 0.066 0.050	0.083 0.028 0.040 0.022 0.040	0.026 0.020 0.041 0.038 0.025	0.019 0.019 0.019 0.019	0.019 (0.019 0.019 0.019		
	30	0.037 0.057 0.084 0.065	0.099 0.142 0.125 0.114	0.082 0.097 0.056 0.063	08000	0.024	0.026	0.024		
	83	0.073 0.065 0.042 0.079 0.073	0.082 0.095 0.148 0.142 0.116	0.087	0.085 0.058 0.063 0.057 0.050	0.029	0.030 0.030 0.046 0.017	0.017		
	28	0.053 0.059 0.069 0.071 0.084	0.119 0.079 0.134 0.137 0.113	0.094 0.080 0.089 0.076	0.061	0.056 0.026 0.029 0.052 0.042	0.029 0.030 0.026 0.042	0.012	0.012	
	27	0.039 0.039 0.071 0.052 0.078	0.099 0.113 0.132 0.107	0.099 0.092 0.097 0.079 0.084	0.059 0.056 0.063 0.062 0.049	0.038 0.038 0.041 0.038 0.038 0.041	0.020 0.041 0.056 0.020 0.047	0.040 0.016 0.016 0.016 0.016 0.016	0.016	
	92	0.033 0.042 0.069 0.057	0.118 0.086 0.128 0.152 0.103	0.096 0.102 0.094 0.083 0.083	0.072 0.068 0.058 0.046 0.056	0.049 0.048 0.035 0.020 0.028	0.029 0.036 0.043 0.020 0.025	0.052 0.021 0.029 0.026 0.026	0.026 0.026 0.026	
	52	0.023 0.023 0.055 0.051 0.067	0.083 0.100 0.156 0.124 0.145	0.126 0.097 0.103 0.089 0.069	0.076 0.080 0.064 0.051 0.058	0.047 0.050 0.050 0.038 0.022	0.031 0.024 0.032 0.030 0.023	0.022 0.025 0.047 0.026 0.021	0.021 0.021 0.021 0.021 0.021	
	24	0.028 0.039 0.056 0.070 0.061	0.127 0.123 0.137 0.169 0.153	0.134 0.113 0.014 0.093 0.086	0.084 0.076 0.065 0.068 0.045	0.045 0.042 0.038 0.040 0.039	0.031 0.029 0.034 0.025 0.028	0.035 0.029 0.043 0.032 0.031	0.021 0.021 0.021 0.021 0.021	
	23	0.035 0.057 0.059 0.073 0.092	0.115 0.168 0.174 0.168 0.167	0.134	0.078 0.064 0.068 0.061 0.057	0.056 0.043 0.035 0.035	0.030 0.028 0.038 0.028 0.020	0.027 0.041 0.022 0.045 0.027	0.0031	0.011
	22	0.038 0 0.038 0 0.069 0 0.052 0	0.093 0 0.146 0 0.171 0 0.168 0	0.135 0 0.124 0 0.111 0 0.000 0	0.082 0 0.073 0 0.068 0 0.063 0	0.053 0 0.044 0 0.039 0	0.024 0 0.024 0 0.032 0 0.025 0	0.036 0 0.033 0 0.028 0 0.024 0	0.028 0 0.016 0 0.013 0 0.024 0	0.024 0
	21	0.044 0 0.048 0 0.068 0 0.056 0	0.073 0 0.074 0 0.115 0 0.109 0	0.115 0.117 0.106 0.101 0.084	0.075 0 0.083 0 0.067 0 0.086 0	0.073 0 0.067 0 0.053 0 0.054 0	0.047 0.032 0.033 0.030 0.032	0.020 0.006 0.031 0.021 0.030	0.042 0 0.033 0 0.028 0 0.014 0	0.014 0
	20	0.029 0 0.029 0 0.118 0 0.076 0	0.057 0 0.055 0 0.087 0 0.094 0	0.112 0.102 0.111 0.107 0.080	0.079 0 0.082 0 0.072 0 0.061 0	0.073 0 0.063 0 0.058 0 0.051 0	0.036 0 0.028 0 0.044 0 0.036 0	0.037 0 0.027 0 0.026 0 0.027 0	0.055 0 0.033 0 0.034 0 0.045 0	0.010 0
	19	0.054 0 0.054 0 0.054 0 0.051 0	0.069 0.061 0.059 0.089 0.084	0.096 0 0.085 0 0.102 0 0.083 0	0.086 0 0.075 0 0.069 0 0.061 0	0.089 0.081 0.080 0.048 0.060	0.058 0 0.051 0 0.050 0 0.036 0	0.025 0 0.038 0 0.029 0 0.029 0	0.030 0.052 0.049 0.066 0.013	0.013 0
	18	0.047 0.047 0.047 0.067 0.067	0.063 0.0051 0.0051 0.0051 0.0051 0.0055 0.0074	0.091 0.096 0.089 0.086 0.090	0.082 0.0081 0.0080 0.0080 0.0056 0.0079	0.099 0.0076 0.0083 0.0081 0.0083 0.0	0.070 0.051 0.036 0.043 0.045	0.026 0.015 0.040 0.015 0.041	0.037 0 0.037 0 0.037 0 0.037 0	0.037 0.
	17	0.054 0.054 0.054 0.054 0.054	0.054 0.054 0.056 0.056 0.096	0.086 0. 0.092 0. 0.081 0. 0.059 0.	0.084 0.0085 0.0080 0.0	0.110 0.0062 0.0078 0.0081 0.0073 0.0073	0.055 0. 0.026 0. 0.026 0. 0.026 0.	0.026 0.026 0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026 0.026	0.026 0.026 0.0
	16	000000	00000	00000	00000	000000	00000	00000	00000	0000
ة م	io e	-	00000	00000	00000	00000	00000	00000	00000	0.0
PEBD Veare of	Service	Under 1 2 3 3 4 4	98492	0 1 1 2 5 4	16 17 18 19	20 22 23 24	25 26 27 28 29	30 32 33 34	35 37 38 39	4 4

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Probability that a member exits the status (due to non-retirement causes) during the fiscal year.

Values for certain cells in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.

Blank cells should be considered a value of zero ('0.000').

Enlisted Selected Reserve Separation Rates (Non-Retirement Causes)

>62	1.000								
62	1.000								
61	0.140 0.140 1.000								
09	0.140 0. 0.140 0. 1.000								
28	0.140 0.140 0.140 0.140 1.000								
28	0.140 0.140 0.140 0.140 0.140 0.140	0001							
25	0.140 0.140 0.140 0.140 0.140 0.140	0.140 1.000							
26	0.140 0.140 0.140 0.140 0.140 0.140 0.140	0.140 0.1 0.140 1.0							
99									
54	0.00.00 0.140 0.140 0.140 0.140	00.140 40 0.140 40 0.140 00 1.000							
53	00 0.140 00 0.140 00 0.140 00 0.140	00.140 00.140 00.140 00.140 1.000	0						
52	0.00.00 0.0140 0.0140 0.0140	0.00.00 0.0140 0.0140 0.0140	0 1:000						
51 6	0 0.140 0 0.140 0 0.140 0 0.140	0 0.140 0 0.140 0 0.140 0 0.140	0 0.140						
50 6	0 0.140 0 0.140 0 0.140 0 0.140	0 0.140 0 0.140 0 0.140 0 0.140	0 0.140 0 0.140 0 1.000						
	0.0140 0.140 0.140 0.140	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.140						
3 49	0.140 0.140 0.140 0.140	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.140 0.140 0.140 1.000						
7 48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1.000					
47	0.0000 44444 64444	0.0000 44000000000000000000000000000000	0.0000 44444 64444	1.000					
46	0.140 0.140 0.140 0.140	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.140					
45	0.156	0.156 0.156 0.156 0.156	0.156 0.156 0.156 0.156	0.156					
44	0.156 0.156 0.156 0.156	0.156 0.156 0.156 0.156	0.156 0.156 0.156 0.156	0.156 0.156 0.156 0.156					
43	0.156 0.156 0.156 0.156	0.156 0.156 0.156 0.156	0.156 0.156 0.156 0.156	0.156 0.156 0.156 0.156 0.156	0.156				
42	0.135 0.135 0.135 0.135	0.135 0.135 0.135 0.135	0.135 0.135 0.135 0.135	0.135 0.135 0.135 0.135	0.135				
41	0.135 0.135 0.135 0.135	0.135 0.135 0.135 0.135	0.135 0.135 0.135 0.135	0.135 0.135 0.135 0.135	0.135				
40	0.174 0.147 0.102 0.139	0.148 0.165 0.155 0.155	0.107 0.135 0.106 0.063 0.078	0.075 0.074 0.062 0.043 0.043	0.043 0.043 0.043 0.043				
38	0.200 0.157 0.128 0.130 0.141	0.139 0.158 0.151 0.151	0.121 0.080 0.098 0.093	0.044 0.056 0.039 0.048 0.066	0.041 0.069 0.010 0.010				
38	0.191 0.162 0.144 0.152 0.117	0.159 0.143 0.162 0.143 0.136	0.121 0.085 0.085 0.061 0.086	0.073 0.059 0.047 0.090	0.056 0.021 0.017 0.017 0.017	0.017			
37	0.189 0.177 0.132 0.136	0.158 0.167 0.149 0.141	0.107 0.097 0.113 0.075 0.084	0.079 0.069 0.040 0.081	0.067 0.048 0.029 0.028 0.075	0.075			
36	0.190 0.149 0.129 0.117	0.191 0.134 0.167 0.147 0.118	0.103 0.115 0.109 0.101 0.073	0.074 0.085 0.059 0.044 0.076	0.060 0.065 0.051 0.016 0.041	0.040			
35	0.192 0.157 0.119 0.111	0.175 0.146 0.191 0.146 0.131	0.100 0.119 0.093 0.098 0.083	0.090 0.059 0.048 0.056 0.056	0.078 0.057 0.062 0.084 0.019	0.033 0.031 0.031			
용	0.197 0.157 0.129 0.122 0.120	0.204 0.149 0.186 0.163 0.132	0.119 0.124 0.094 0.076 0.085	0.085 0.054 0.064 0.037 0.061	0.086 0.097 0.089 0.089 0.047	0.020 0.016 0.016 0.016 0.016			
33	0.171 0.145 0.130 0.128	0.204 0.150 0.193 0.151 0.128	0.127 0.136 0.110 0.106 0.093	0.093 0.055 0.060 0.052 0.052	0.087 0.088 0.090 0.096	0.056 0.012 0.008 0.008 0.008	0.008		
32	0.203 0.162 0.137 0.126 0.121	0.211 0.151 0.198 0.153 0.160	0.132 0.125 0.114 0.097	0.073 0.056 0.063 0.064 0.068	0.090 0.101 0.086 0.081 0.106	0.089 0.059 0.021 0.026 0.063	0.063		
31	0.182 0.159 0.132 0.131 0.124	0.225 0.186 0.203 0.162 0.138	0.135 0.146 0.105 0.110 0.084	0.096 0.056 0.063 0.061	0.085 0.085 0.085 0.087	0.082 0.089 0.050 0.005	0.025 0.025 0.025		
30	0.189 0.155 0.127 0.140	0.216 0.170 0.249 0.173 0.157	0.151 0.132 0.113 0.120 0.087	0.080 0.076 0.070 0.067 0.066	0.094 0.094 0.084 0.068 0.079	0.075 0.087 0.060 0.060	0.006		
82	0.190 0.155 0.151 0.137 0.137	0.257 0.180 0.227 0.169 0.148	0.148 0.138 0.121 0.110 0.098	0.084 0.074 0.065 0.065 0.074	0.091 0.106 0.085 0.075 0.087	0.048 0.051 0.062 0.047 0.032	0.009 0.017 0.017 0.017		
28	0.170 0.165 0.142 0.141 0.138	0.261 0.202 0.248 0.187 0.167	0.145 0.130 0.121 0.131 0.104	0.089 0.084 0.052 0.052	0.092 0.084 0.089 0.076 0.082	0.057 0.060 0.057 0.069 0.039	0.010 0.008 0.005 0.005 0.005	0.005	
27	0.177 0.151 0.141 0.134 0.136	0.257 0.196 0.258 0.192 0.161	0.170 0.154 0.131 0.136 0.115	0.110 0.087 0.072 0.065 0.072	0.089 0.107 0.088 0.088 0.073	0.066 0.060 0.066 0.046 0.064	0.037 0.018 0.013 0.021 0.021	0.021	
98	0.176 0.159 0.145 0.143	0.284 0.206 0.254 0.202 0.169	0.165 0.156 0.127 0.118 0.116	0.094 0.084 0.071 0.055 0.070	0.092 0.098 0.087 0.076 0.073	0.068 0.052 0.059 0.036 0.053	0.047 0.029 0.014 0.020 0.012	0.012	
52	0.164 0.151 0.148 0.133	0.294 0.216 0.280 0.205 0.173	0.165 0.154 0.137 0.137 0.113	0.091 0.076 0.072 0.053 0.076	0.097 0.100 0.087 0.075 0.057	0.061 0.046 0.051 0.041 0.051	0.049 0.033 0.041 0.019 0.011	0.005	
24	0.171 0.148 0.137 0.129 0.138	0.294 0.218 0.288 0.217 0.176	0.158 0.157 0.132 0.129 0.103	0.094 0.077 0.068 0.071 0.079	0.093 0.083 0.073 0.084 0.059	0.071 0.049 0.049 0.033	0.040 0.039 0.027 0.028 0.018	0.017 0.018 0.018 0.018 0.018	
23	0.164 0.149 0.135 0.142	0.309 0.225 0.292 0.223 0.179	0.175 0.161 0.147 0.141 0.114	0.099 0.082 0.075 0.060 0.083	0.099 0.084 0.087 0.082 0.074		0.024 0.035 0.032 0.029 0.042	0.019 0.023 0.023 0.023	0.023
22	0.160 0.148 0.133 0.143	0.318 0.229 0.308 0.224 0.179	0.170 0.160 0.139 0.142 0.113	0.094 0.085 0.075 0.062 0.084	0.097 0.096 0.070 0.077 0.067		0.042 0.026 0.036 0.046	0.024 0.004 0.004 0.004	0.004
21	0.156 0.144 0.134 0.137	0.335 0.238 0.306 0.230 0.186	0.168 0.159 0.134 0.137 0.107	0.096 0.085 0.067 0.086	0.097 0.086 0.087 0.087	0.062 0.056 0.049 0.043	0.037 0.025 0.031 0.028 0.041	0.030 0.028 0.021 0.006 0.006	0.006
20	0.153 0.141 0.127 0.129 0.135	0.341 0.237 0.233 0.183	0.170	0.096 0.088 0.073 0.058	0.099 0.092 0.081 0.085		0.032 0.034 0.032 0.036	0.034 0.027 0.031 0.011	0.011
19	0.164 0.149 0.116 0.118	0.235 0.235 0.299 0.233 0.178	0.160 0.154 0.127 0.131 0.112	0.093 0.085 0.071 0.060 0.082	0.101 0.093 0.084 0.077 0.074	0.061 0.055 0.045 0.042 0.039	0.030 0.030 0.023 0.016 0.028	0.025 0.026 0.026 0.025 0.025	0.025 (
18	0.169 0.214 0.133 0.108 0.106	0.293 0.210 0.278 0.231 0.173	0.143 0.167 0.132 0.132 0.110	0.097 0.082 0.074 0.062 0.095	0.119 0.109 0.006 0.086 0.076	0.059 0.059 0.054 0.040 0.037	0.036 0.029 0.027 0.022 0.021	0.028 0.025 0.032 0.024 0.024	0.024 0
17	0.128 0 0.233 0 0.155 0 0.103 0	0.226 0.233 0.228 0.238 0.178	0.145 0.178 0.161 0.148 0.115	0.094 0.105 0.081 0.063 0.111	0.150 0.137 0.115 0.108 0.113	0.073 0.094 0.095 0.057 0.061	0.047 0 0.047 0 0.047 0	0.047 0 0.047 0 0.047 0 0.047 0	0.047 0
16	0 00000	000000	000000	000000	000000	000000	000000	000000	0.000.0
vice vice	_	50000	20000	20000	30000	20000	50000	30000	00
Service	Under . 2 3 4	5 9 1 8 5	0 = 5 5 4	5 1 5 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1	23 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	25 27 28 29 29	33 33 34 34	35 37 39 39	4 40

CRIPTION: Selected Reserve Separation Rates
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member exits the status (due to non-retirement causes) during the fiscal year.
Values for certain cells in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.
Blank cells should be considered a value of zero ('0.000').

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Officer Selected Reserve Reentrant Rates

0.267 0.267 0.267 0.267 0.267 0.267 0.267 0.267 0.268 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028

0.267 0.267 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028 0.028

53	0.267 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028						
52	0.267 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028					
51	0.267 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028					
90	0.238 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028					
49	0.213 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028					
48	0.211 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028					
47	0.355 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028				
46	0.297 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028				
	0.243 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028				
	0.211 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028				
	0.259 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028				
42	0.239 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028			
41	0.298 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	0.028			
40	0.239 0.029 0.029 0.029				0.029			
38	0.032 0.032 0.032 0.032 0.032	0.032 0.032 0.032 0.032	0.032 0.032 0.032 0.032 0.032	0.032 0.032 0.032 0.032 0.032	0.032 0.032 0.032 0.032			
38	0.214 0.038 0.038 0.038 0.038	0.038 0.038 0.038 0.038	0.038 0.038 0.038 0.038	0.038 0.038 0.038 0.038	0.038 0.038 0.038 0.038			
	0.040 0.040 0.040 0.040	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.040 0.040 0.040 0.040	0.040 0.040 0.040 0.040	0.040 0.040 0.040 0.040 0.040	0.040		
	0.339 0.027 0.027 0.027 0.036	0.042 0.042 0.042			0.037 0.037 0.037 0.037	0.037		
	0.259 0.027 0.027 0.027 0.056	0.044 0.093 0.082 0.099			0.02 0.02 1.02 0.02 1.03 0.02	0.021		
	0.150 0.059 0.048 0.054 0.051							
	0.222 0.052 0.033 0.035 0.036	0.061 0.049 0.111 0.082 0.055			0.016 0.016 0.016 0.016	0.016 0.016 0.016 0.016 0.016		
32	0.192 0.046 0.049 0.069 0.092	0.053 0.070 0.127 0.064 0.058			0.020 0.020 0.020 0.020	0.020 0.020 0.020 0.020 0.020	0.020	
							0.019	
							0.024 0.024 0.024	
	0.227 0.032 0.057 0.089 0.126		0.074 0.079 0.058 0.051 0.047	0.039 0.035 0.034 0.034	0.035 0.025 0.031 0.033	0.021 0.022 0.034 0.019 0.002	0.002 0.002 0.002 0.002	
								0.016
								0.015
								0.0 410.0 410.0
								0.017 0.017 0.017 0.017
								0.021 0.001 0.008 0.008 0.008
								0.013 0.009 0.009
								0.028 0.008 0.008 0.008
								0.020 0.025 0.031 0.003
								0.021 0.021 0.033 0.033
18	0.353 0.353 0.353 0.281	0.038	0.054 0.050 0.050 0.052	0.045 0.033 0.036 0.036	0.035 0.035 0.030 0.049	0.0036	0.031 0.032 0.032 0.019	0.013
	39 40 41 42 43 44 45 46 47 48 49 50 51 52	19 70 21 22 23 24 25 26 26 27 28 28 28 28 28 28 28 28 28 28 28 28 28	16 20 21 22 22 22 22 22 22 22 22 22 22 22 22	14 20 21 22 22 22 22 22 22 22 22 22 22 22 22	1	14 15 15 15 15 15 15 15	1	14 15 15 15 15 15 15 15

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Increment rate that a member enters reserve status during the fiscal year.
For PEBD YOS greater than 15, if the reentrant rate > loss rate then set the reentrant rate equal to the loss rate.
Additional adjustments are made in an open group valuation in order to prevent the population. from becoming "over-strengthed" relative to DoD-Comptroller projected endstrengths. Values for oreatin roles in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.
Blank cells should be considered a value of zero (0.000).

Selected Reserve Reentrant Rates -- Members have a prior entry date

0.013 0.008 0.008 0.013 0.008

Enlisted Selected Reserve Reentrant Rates

Епту Аде	39 40 41 42 43 44 45 46 47 48 49 59 51 52 53 54 55 55 57 58 59 60 61 62 $\times 82$	0.089 0.081 0.082 0.084 0.088 0.189	0.687 0.890 1.440 1.455 0.896 0.896 0.198 0.498 0.198	0.07% 0.141 0.145 0.075 0.073 0.107 0.186	0044 0.016 0.029 0.075 0.073 0.107 0.189 0.189 0.188 0	0011 0015 0028 0075 0011 0015 0028 0011 0015 0028				
ByE	37 38	0.101 0.082 0.047 0.059 0.101 0.081 0.102 0.127 0.079 0.104	0.336 0.544 0.165 0.181 0.237 0.220 0.084 0.140 0.078 0.096	0.079 0.090 0.087 0.054 0.062 0.074 0.035 0.060 0.042 0.052	0.038 0.023 0.032 0.021 0.032 0.020 0.017 0.009 0.021 0.009	0.006 0.009 0.006 0.009 0.006 0.009 0.006 0.009	90000			
	35 36	0.081 0.083 0.051 0.060 0.066 0.068 0.110 0.102 0.081 0.073	0.155 0.216 0.161 0.146 0.284 0.229 0.090 0.086 0.073 0.092	0.063 0.061 0.069 0.079 0.066 0.058 0.059 0.044 0.053 0.045	0.038 0.037 0.025 0.021 0.024 0.037 0.010 0.020 0.016 0.013	0.012 0.012 0.011 0.015 0.016 0.004 0.006 0.004 0.006 0.004	0.006 0.004 0.006 0.004 0.006			
	স্ক	0.085 0.0 0.058 0.0 0.082 0.0 0.128 0.1	0.154 0.1 0.178 0.1 0.347 0.2 0.093 0.0	0.067 0.0 0.080 0.0 0.071 0.0 0.044 0.0	0.030 0.0 0.025 0.0 0.026 0.0 0.018 0.0	0.011 0.012 0.005 0.005 0.005	0.005 0.005 0.005 0.005			
	32 33	3 0.073 3 0.057 4 0.060 7 0.142 3 0.088	3 0.109 6 0.208 6 0.430 6 0.108 7 0.092	3 0.074 5 0.091 1 0.076 6 0.065 4 0.064	8 0.031 7 0.033 0 0.033 5 0.028 4 0.018	7 0.017 0 0.020 5 0.009 1 0.010 1 0.012	5 0.003 5 0.003 5 0.003 5 0.003	us.		
	31 3	0.064 0.073 0.057 0.063 0.078 0.074 0.138 0.137 0.083 0.093	0.089 0.093 0.205 0.206 0.605 0.566 0.119 0.116 0.084 0.097	0.074 0.073 0.095 0.085 0.080 0.081 0.060 0.066 0.073 0.054	0.037 0.038 0.035 0.027 0.032 0.020 0.028 0.015 0.021 0.014	0.014 0.017 0.015 0.010 0.010 0.015 0.010 0.011 0.009 0.011	0.007 0.005 0.007 0.005 0.007 0.005 0.007 0.005	0.007		
	30	0.070 0. 0.048 0. 0.086 0. 0.121 0. 0.097 0.	0.097 0) 0.189 0; 0.593 0) 0.128 0.	0.068 0, 0.092 0, 0.078 0, 0.063 0,	0.036 0.029 0.039 0.031 0.016	0.023 0.0028 0.0018 0.0019 0.0019 0.0019 0.0019	0.005 0.005 0.0005 0.0005 0.0005 0.0005	0.005 0.005 0.005		
	83	0.060 0.046 0.077 0.128 0.105	0.097 0.230 0.536 0.114 0.098	0.086 0.070 0.069 0.060 0.057	0.047 0.038 0.026 0.025 0.023	0.013 0.018 0.013 0.012	0.009 0.008 0.010 0.004	0.004		
	27 28		2 0.108 0 0.234 3 0.492 7 0.114 1 0.083	3 0.090 4 0.072 3 0.078 1 0.067 6 0.055	6 0.045 4 0.034 4 0.036 5 0.032 5 0.026	6 0.021 9 0.018 5 0.020 3 0.014 2 0.014	0 0.011 5 0.014 8 0.008 9 0.005 1 0.005	3 0.003 4 0.003 4 0.003 4 0.003	4	
	58	0.059 0.067 0.052 0.052 0.080 0.073 0.163 0.151 0.138 0.098	0.129 0.112 0.198 0.220 0.435 0.433 0.118 0.107 0.087 0.091	0.079 0.083 0.073 0.084 0.070 0.073 0.057 0.061 0.048 0.056	0.045 0.046 0.039 0.044 0.033 0.034 0.023 0.025 0.025 0.025	0.025 0.016 0.016 0.019 0.019 0.015 0.017 0.013 0.016 0.012	0.013 0.010 0.013 0.015 0.008 0.018 0.019 0.009 0.011 0.011	0.010 0.013 0.008 0.004 0.007 0.004 0.007 0.004	0.007 0.004	
	52	0.060 0.0 0.054 0.0 0.086 0.0 0.195 0.	0.133 0.185 0.368 0.108 0.094	0.086 0.0 0.079 0.0 0.067 0.0 0.046 0.0	0.039 0.0 0.038 0.0 0.026 0.0 0.027 0.0	0.020 0.023 0.020 0.020 0.015	0.013 0.0 0.014 0.0 0.017 0.0 0.015 0.0	0.007 0.012 0.010 0.010 0.010	0.010 0.010 0.010	
	24	0.053 0.052 0.083 0.186 0.145	0.131 0.185 0.318 0.015 0.089	0.087 0.077 0.062 0.056 0.056	0.035 0.034 0.030 0.025 0.025	0.021 0.017 0.023 0.020 0.018	0.017 0.019 0.015 0.012 0.012	0.008 0.013 0.014 0.004	0.004	
	23	0.050 0.051 0.087 0.194 0.141	0.134 0.181 0.290 0.103 0.085	0.078 0.063 0.063 0.063	0.039 0.037 0.027 0.027 0.028	0.015 0.020 0.018 0.020 0.020	0.019 0.015 0.013 0.009	0.011 0.007 0.009 0.012	0.013 0.002 0.002 0.002 0.002	
	22	0.048 0.051 0.083 0.190 0.142	0.137 0.187 0.257 0.100 0.091	0.075 0.075 0.061 0.049 0.053	0.042 0.032 0.028 0.026 0.026	0.019 0.017 0.022 0.017 0.016	0.017 0.016 0.020 0.015 0.015	0.009 0.015 0.021 0.016 0.013	0.013 0.009 0.007 0.007	0.007
	0 21	0.043 0.080 0.080 0.187 0.139	3 0.135 5 0.173 7 0.217 8 0.098 2 0.090	0.064 0.059 0.050 0.051	5 0.037 3 0.023 4 0.022 1 0.022	9 0.018 2 0.016 8 0.022 5 0.021	5 0.015 8 0.014 2 0.017 5 0.016	7 0.018 7 0.001 7 0.008 0 0.009	0.008 0.008 0.008 0.008	3 0.008
	19 20	29 0.038 30 0.041 48 0.070 39 0.176 34 0.144	24 0.133 14 0.166 17 0.167 39 0.088 70 0.082	50 0.071 53 0.065 51 0.053 42 0.049 41 0.047	36 0.035 30 0.033 26 0.028 25 0.024 22 0.021	21 0.019 20 0.022 21 0.018 19 0.015	18 0.025 18 0.018 21 0.014 17 0.012 15 0.016	13 0.011 14 0.017 20 0.010 0.010	05 0.011 00 0.008 10 0.001 10 0.003	0.003
	18	30 0.029 112 0.030 21 0.048 66 0.139 77 0.134	0.074 0.124 0.099 0.144 0.074 0.117 0.041 0.069 0.051 0.070	46 0.060 40 0.053 37 0.051 38 0.042 38 0.041	27 0.036 30 0.030 27 0.026 24 0.025 21 0.022	22 0.021 24 0.020 22 0.021 23 0.019	0.023 0.018 0.023 0.018 0.019 0.021 0.023 0.017 0.017 0.015	0.016 0.013 0.012 0.014 0.017 0.014 0.010 0.020 0.011 0.009	0.005 111 0.008 111 0.010 11 0.010	0.011 0.010
	17	0.121 0.030 0.006 0.012 0.004 0.021 0.012 0.066	0.026 0.0 0.050 0.0 0.052 0.0 0.027 0.0	0.032 0.046 0.027 0.040 0.032 0.037 0.030 0.038 0.046 0.038	0.035 0.027 0.034 0.030 0.029 0.027 0.046 0.024 0.034 0.021	0.021 0.022 0.025 0.022 0.020 0.024 0.030 0.022 0.025 0.023	0.020 0.0 0.024 0.0 0.030 0.0 0.022 0.0	0.026 0.0 0.026 0.0 0.026 0.0 0.026 0.0	0.026 0.011 0.026 0.011 0.026 0.011 0.026 0.011	0.026 0.0
	16	00000	00000	00000	00000	00000	00000	00000	00000	00000
PEBD	Service	Under 1	n @ r @ o	011224	5 6 7 8 6	22 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	33234	35 34 37 39 39	04 4

SCRIPTION: Selected Reserve Reentrant Rates -- Members have a prior entry date
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Increment rate that a member enters reserve status during the fiscal year.
For PEBD YOS greater than 15, if the reentrant rate > loss rate then set the reentrant rate equal to the loss rate.
Additional adjustments are made in an open group valuation in order to prevent the population from becoming "over-strengthed" relative to DoD-Comptroller projected endstrengths.
Values for certain cells in above rate table may represent little to no exposure in the population, hence have minimal or no impact on results.
Blank cells should be considered a value of zero (0.000).

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Officer Selected Reserve Net Separation Rates (Non-Transfer/Retirement)

>62	1.000								
62	1.000								
61	0.066 -0								
09	0.072 0.0072 0.0072 1.000								
28	0.085 -0.0154 0.0.154 0.0.154 1.000								
28	0.020 0.020 0.020 0.020 0.020 0.020	000.1							
22	0.025 0.0 0.025 0.0 0.025 0.0 0.025 0.0	0.025 1.000							
99									
22	51 -0.172 78 0.067 78 0.067 78 0.067 78 0.067	78 0.067 78 0.067 78 1.000							
54	28 -0.161 1 0.078 1 0.078 1 0.078	1 0.078 1 0.078 1 1.000							
53	73 -0.168 56 0.071 56 0.071 56 0.071	36 0.071 36 0.071 36 0.071 36 0.071	0						
52 (0 0.066 0 0.066 0 0.066 0 0.066	0.006	0 1.000						
51 5	3 -0.209 6 0.030 6 0.030 6 0.030	6 0.030 6 0.030 6 0.030 6 0.030	6 0.030 0 1.000						
	7 -0.183 3 0.056 3 0.056 3 0.056	3 0.056 3 0.056 3 0.056 3 0.056	3 0.056 3 0.056 3 1.000						
9 20	3 -0.187 2 0.023 2 0.023 2 0.023	0.023 0.023 0.023 0.023	2 0.023 2 0.023 2 0.023						
3 49	0.052 0.052 0.052 0.052	0.052 0.052 0.052 0.052	0.052						
48	0.089	0.089	0.0089	1.000					
47	-0.251 0.076 0.076 0.076 0.076	0.076 0.076 0.076 0.076 0.076	0.076 0.076 0.076 0.076 0.076	1.000					
46	-0.190 0.079 0.079 0.079 0.079	0.079 0.079 0.079 0.079	0.079 0.079 0.079 0.079	0.079					
45	0.061	0.061 0.061 0.061 0.061	0.061 0.061 0.061 0.061	0.061					
44	0.071 0.071 0.071 0.071	0.071 0.071 0.071 0.071	0.071 0.071 0.071 0.071	0.071 0.071 0.071 0.099					
43	-0.161 0.070 0.070 0.070	0.070 0.070 0.070 0.070 0.070	0.070 0.070 0.070 0.070 0.070	0.070 0.070 0.070 0.070 0.070	0.098				
42	-0.199 0.012 0.032 0.082 0.115	0.035 0.035 0.035 0.035 0.035	0.035 0.035 0.035 0.035	0.035 0.035 0.035 0.035 0.035	0.035				
41	0.008 0.041 0.107 0.055	0.035 0.035 0.035 0.035	0.035 0.035 0.035 0.035	0.035 0.035 0.035 0.035	0.035				
40	0.035 0.036 0.065 0.031	0.033 0.057 0.052 0.105 0.030	0.031 0.088 0.038 0.011 0.011	0.0 0.0 0.0 0.0 0.0 0.0 0.0	0.011 0.011 0.040				
38	-0.195 0.007 0.081 0.062	0.087 0.057 0.059 0.092 0.095	0.059 0.040 0.010 0.010	0.010 0.010 0.010 0.010	0.010 0.010 0.010 0.042				
38	-0.135 0.030 0.032 0.043	0.092 0.015 0.119 0.114 0.137	0.072 0.011 0.011 0.011	0.011 0.011 0.011 0.011	0.01 0.01 0.01 0.01 0.01	0.049			
37	0.027 0.035 0.054 0.048	0.049 0.050 0.104 0.093 0.090	0.066			0.040			
36	0.047 0.039 0.038 0.024	0.053 0.015 0.071 0.090 0.091	0.086 0.072 -0.007 -0.007 -0.007	0.002 0.002 0.002 0.002	0.002 0.002 0.002 0.002	-0.002 -0.002 0.035			
35	0.048 0.048 0.051 0.046	0.020	0.031 0.006 0.019 0.026	0.009 0.025 0.040 0.040	0.00.00.00.00.00.00.00.00.00.00.00.00.0	0.001			
8	0.009 0.041 0.020	0.023 0.040 0.029	0.062 0.016 0.011 0.040	0.016 0.013 0.023 0.023 0.015	0.015 0.001 0.001 0.001	0.001			
33	0.025 0.045 0.044 0.017	0.009 0.009 0.074 0.042	0.014 0.040 0.045 0.048 0.056	0.003 0.004 0.007	0.005 0.004 0.013 0.013	0.013 0.013 0.013 0.013	0.029		
32	0.028 0.028 0.045 0.019	0.048 0.006 0.043 0.094 0.009	0.076 0.005 0.011 0.028	0.029 0.038 0.027 0.008 0.034	0.027 0.004 0.008 0.008 0.008	0.008 0.008 0.008 0.008	0.008		
31	0.018 0.030 0.030 0.003	0.006 0.018 0.035 0.124 0.021	0.055 0.028 0.029 0.027	0.045 0.004 0.005 0.023	0.005 0.016 0.016 0.003		0.019		
30	-0.002 -0.009 0.018	0.036 0.015 0.032 0.019 0.025	0.035	0.003 0.039 0.005 0.014 0.012	0.003	0.001 0.003 0.013 0.012	0.024		
53	0.033 0.015 0.015 0.010	0.006 0.027 0.029 0.029	0.013 0.028 0.047 0.031	0.046 0.025 0.028 0.023	0.026	0.005 0.002 0.012 0.015	0.015 0.015 0.015 0.015		
28	0.222 0.046 0.029 0.064 0.064	0.028 0.040 0.022	0.002 0.008 0.033 0.033	0.015 0.033 0.035 0.030 0.015	0.030 0.010 0.022 0.022 0.005	0.009	0.003 0.003 0.003 0.003	0.012	
27	-0.226 -0.018 -0.025 -0.126 -0.106	0.040 0.040 0.040 0.006 0.006	0.014 0.039 0.034 0.034	0.016 0.027 0.026 0.040 0.013	0.010 0.014 0.009 0.011	0.007 0.027 0.023 0.023	0.016	0.016	
58	0.335 -0.022 -0.063 -0.057		0.001 0.029 0.023 0.012	0.033 0.028 0.024 0.009 0.025	0.010 0.018 0.002 0.001	0.003	0.021 0.006 0.014 0.011	0.011	
52	0.323 0.064 0.073 0.205 0.135		0.011 0.015 0.018 0.022 0.024	0.040 0.013 0.025 0.028	0.010 0.018 0.018 0.007 -0.002	0.002 0.007 0.004 0.009	0.003 0.033 0.012 0.007	0.007 0.007 0.007 0.021	
24	0 0 3 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		0.013 0.035 0.020 0.028	0.033 0.041 0.030 0.028 0.013	0.009 0.018 0.010 0.014 0.002		0.012 0.002 0.015 0.015	0.004	
23	0.128 0.128 0.161 0.161		0.028 0.016 0.015 0.028 0.037	0.031 0.034 0.026 0.026	0.024 0.010 0.014 0.002	0.001	0.003	0.0010	0.011
22	0.542 -0.240 -0.077 -0.278 -0.337		0.006	0.041 0.033 0.025 0.025	0.0020		0.006	0.003 0.004 0.015 0.015	0.015 (
21	0.289 -0.250 -0.051 -0.003 -0.008		0.040 0.020 0.009 0.027	0.026 0.029 0.038 0.033	0.028 0.032 0.018 0.025	0.0020	0.002	0.025 0.025 0.006 0.006	0.006
20	0.128 -0.307 -0.182 -0.050 -0.015	0.013 0.016 0.029 0.023	0.046 0.033 0.042 0.014	0.009 0.031 0.029 0.023	0.023 0.024 0.006 0.017		0.004	0.035 0.008 0.003 0.032	0.002
19	0.605 0 0.605 0 0.507 0 0.020 0	0.028 0.012 0.004 0.030 0.020	0.030 0.013 0.033 0.024 0.027	0.039 0.029 0.029 0.023 0.039	0.057 0.042 0.044 0.009 0.022		0.002 0.003 0.003 0.003	0.031 0	20
18	0.306 0.306 0.236 0.234 0.061	0.013 0 0.006 0 0.024 0 0.019 0	0.032 0.042 0.039 0.034 0.044	0.040 0.036 0.047 0.020 0.045	0.064 0 0.041 0 0.051 0	0.022 0 0.012 0 0.003 0 0.002 0	0.005 0.005 0.008 0.004 0.004	0.024 0.024 0.024 0.024 0.024	0.024
17	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.012 0.012 0.012 0.014 0.054	0.044 0.0050 0.0039 0.0017 0.0063	0.042 0.043 0.018 0.018 0.033	0.068 0 0.020 0 0.036 0 0.039 0		6 6 6 6 6 6 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.004
16	000000	0.0000000000000000000000000000000000000	0.0000	0.0000	0.0000000000000000000000000000000000000		99999	000000	0.000.0
ice /ice	_	00000	00000	00000	00000	00000	00000	00000	00
Service	Under 1 2 3 4	20 10 20	0 1 2 5 4	5 1 5 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1	27 23 24 24	25 27 28 29	33 33 34 34	35 37 38 39	0 4 4

CRIPTION: Selected Reserve Net Separation Rates
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member exits the status (due to non-retirement causes)
offset by the rate that a member reenters during the fiscal year.
For PEBD YOS greater than 15, if reentrant rate > loss rate, then reentrant is set equal to the loss rate (i.e., to not allow any negative net loss).
Blank cells should be considered a value of zero (0.000).

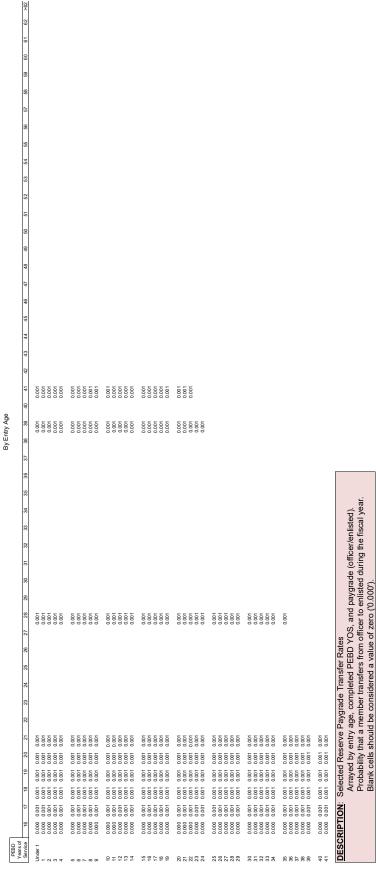
- 133 -

Enlisted Selected Reserve Net Separation Rates (Non-Transfer/Retirement)

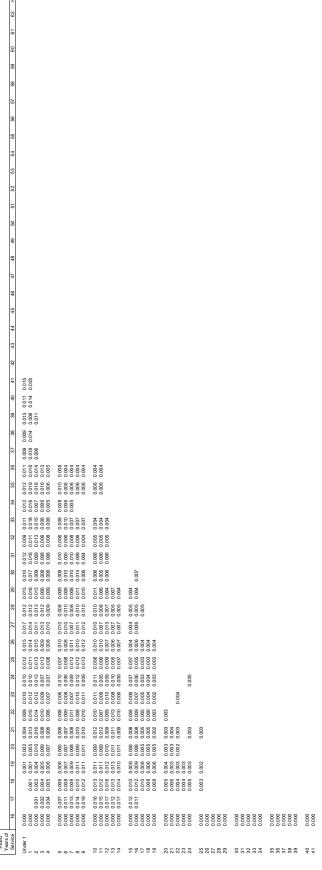
	>62	1.000								
	62 >	0.028 1.0								
	61	0.028 -0.0 0.028 1.0 1.000								
	09	-0.028 -0.0 -0.028 -0.0 -0.028 1.0								
	26	0.028 -0.								
	28	0.028 0.0 0.028 0.0 0.028 0.0 0.028 0.0	1.000							
	22	0.028 0.0 0.028 0.0 0.028 0.0 0.028 0.0	1.000							
	99	0.028 0.028 0.028 0.028 0.028 0.028	-0.028 -0.0 -0.028 1.0 1.000							
	22	0.028 0.028 0.028 0.028 0.028 0.028	-0.028 -0.028 -0.028 1.000 1.000							
	54	0.028 0.028 0.028 0.028 0.028	-0.028 -0.028 -0.028 -0.028 -0.028 -1.000							
	53	0.028 0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028	1.000						
	52	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028 0.028	1.000 1.						
	51	0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028 0.028	-0.028 -0. 1.000 1.						
	20	0.028 0.028 0.028 0.028 0.028	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-0.028 -0.028 -0.028 -0.028 -1.000						
	49	0.028 0.028 0.028 0.028	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.028 0.028 0.028 1.000 1.000						
	48	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.028	1.000					
	47	0.028 0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028 0.028	0.028 0.028 0.028 0.028 0.028 0.028	1.000					
	46	-0.028 -0. -0.028 -0. -0.028 -0. -0.028 -0.	-0.028 -0. -0.028 -0. -0.028 -0. -0.028 -0.	-0.028 -0. -0.028 -0. -0.028 -0. -0.028 -0.	-0.028 -0. 1.000					
	45	0.012 0.012 0.012 0.012 0.012 0.012	0.012 0.012 0.012 0.012 0.012 0.012 0.012	0.012 0.012 0.012 0.012 0.012 0.012 0.012	-0.012 -0. -0.012 -0. -0.012 1.					
	44	0.013 0.0208 0.111 0.130 0.030	0.804 0.025 0.015 0.049 0.049	0.049 0.049 0.049 0.049 0.049 0.040	0.049 -0. 0.049 -0. 0.049 -1. 0.049 1.					
	43	0.068 0.020 0.188 0.407 0.084	0.740 0.015 0.078 0.078 0.083 0.083	0.083 0.0080 0.0083 0.0	0.083 0. 0.083 0. 0.083 0. 0.083 0.	0.156				
	42	0.051 0.060 0.262 0.468 0.182 0.062	0.040 0.043 0.048 0.048 0.068	0.0000	0.0600	0.060 0.0135				
	41	0.043 0 0.030 0 0.317 0 0.096 0	0.030 0.025 0.025	0.039	0.107 0.107 0.107 0.107 0.107	0.107 0				
	40	0.093 0 0.090 0 0.027 0 0.105 0	0.732 -1 -0.054 -0 -0.041 -0 0.002 0	0.034 0 0.053 0 0.017 0 0.035 0	0.060 0 0.059 0 0.047 0 0.028 0	0.028 0 0.028 0 0.028 0 0.043				
y Age	33	0.114 0.106 0.029 0.003 0.016	0.518 0 -0.054 0 -0.075 0 0.020 0 0.031 0	0.045 -0 0.049 0 0.027 0 0.037 0	0.045 0 0.028 0 0.037 0 0.055 0	0.030 0.058 0.001 0.001				
By Entry Age	38	0.109 0.103 0.063 0.025 0.013	0.385 0.038 0.058 0.003 0.040	0.031 0.047 0.011 0.034	0.050 0.038 0.045 0.038 0.081	0.047 0.012 0.008 0.008 0.008	0.017			
_	37	0.088 0.130 0.034 0.030	0.085 0.083 0.085 0.083	0.028 0.010 0.051 0.040 0.042	0.041 0.037 0.023 0.023 0.060	0.061 0.042 0.023 0.022 0.069	0.069 0.075			
	36	0.107 0.089 0.061 0.015 0.044	0.025 0.062 0.062 0.062 0.083	0.042 0.036 0.051 0.057 0.028	0.037 0.064 0.022 0.024 0.063	0.048 0.050 0.047 0.012 0.037	0.036			
	35	0.111 0.053 0.001 0.032	0.020 -0.015 -0.093 -0.056 0.058	0.037 0.050 0.027 0.039 0.030	0.052 0.034 0.024 0.046	0.066 0.046 0.078 0.013	0.027 0.025 0.025 0.031			
	×	0.112 0.089 0.047 0.029	0.050 -0.029 -0.161 -0.057	0.052 0.044 0.023 0.032	0.055 0.029 0.038 0.019 0.039	0.085 0.081 0.084 0.042	0.015			
	33	0.098 0.088 0.086 0.040	0.095 -0.058 -0.237 0.043	0.053 0.034 0.029	0.062 0.022 0.027 0.024 0.043	0.064 0.079 0.080 0.084	0.003	800:0		
	32	0.130 0.099 0.063 -0.011 -	0.118 -0.055 - -0.368 - 0.037 0.063	0.059 0.040 0.044 0.048 0.043	0.035 0.029 0.043 0.054	0.073 0.091 0.070 0.095	0.084 0.054 0.016 0.021 0.058	0.058		
	31	0.118 0.054 0.054 0.041	0.136 0.019 0.043 0.054	0.061 0.051 0.055 0.050 0.011	0.059 0.021 0.033 0.048	0.079 0.070 0.071 0.075 0.078	0.075 0.082 0.043 0.002 0.018	0.018 0.025		
	30	0.119 0.070 0.006 0.043	0.119 -0.344 0.045	0.083 0.040 0.035 0.056 0.024	0.044 0.047 0.031 0.036	0.071 0.066 0.049 0.060	0.070 0.082 0.074 0.055	0.001		
	29	0.130 0.109 0.074 0.009 0.032		0.062 0.068 0.052 0.050 0.041	0.037 0.036 0.040 0.040	0.078 0.087 0.067 0.062 0.075	0.039 0.043 0.053 0.037 0.028	0.005 0.013 0.013 0.013		
	28	0.105 0.107 0.072 -0.012 0.018	0.153 -0.032 -0.244 0.073 0.084	0.058 0.058 0.064 0.064	0.044 0.050 0.028 0.020 0.058	0.066 0.069 0.062 0.062	0.066 0.046 0.049 0.064 0.034	0.007 0.005 0.002 0.002	0.005	
	27				0.064 0.043 0.040 0.047			0.024 0.014 0.009 0.017 0.017	0.021	
	92	0.117 0.107 0.065 -0.020	0.155 0.008 -0.181 0.084 0.082	0.086 0.083 0.057 0.061 0.068	0.045 0.038 0.032 0.045	0.067 0.082 0.068 0.059	0.055 0.039 0.051 0.017 0.042	0.037 0.0021 0.007 0.013	0.005	
	25	0.104 0.097 0.062 0.062 0.009	0.161 0.031 0.097 0.097	0.079 0.075 0.074 0.067	0.052 0.038 0.046 0.026 0.026	0.077 0.067 0.067 0.055 0.042	0.048 0.032 0.034 0.026	0.042 0.021 0.031 0.009	0.005	
	54	0.118 0.096 0.054 0.057 0.007	0.163 0.033 0.102 0.087	0.071 0.080 0.070 0.073 0.073	0.059 0.043 0.046 0.046	0.072 0.066 0.050 0.064 0.064	0.054 0.030 0.032 0.032	0.032 0.026 0.016 0.017 0.017	0.013 0.014 0.014 0.018	
	23	0.114 0.098 0.048 0.064 0.001	0.175 0.004 0.002 0.120 0.094	0.097 0.091 0.084 0.081 0.061	0.060 0.045 0.033 0.033	0.084 0.064 0.069 0.062 0.053	0.045 0.020 0.026 0.026	0.013 0.025 0.020 0.030	0.006 0.008 0.021 0.021 0.021	0.023
	22	0.112 0.097 0.057 -0.057 0.001	0.181 0.042 0.051 0.124 0.088	0.095 0.085 0.078 0.093 0.060	0.052 0.053 0.047 0.036 0.058	0.078 0.048 0.060 0.051	0.050 0.043 0.030 0.022 0.025	0.033 0.011 0.020 0.033	0.028 -0.003 -0.003 -0.003	-0.003
	21	0.113 0.098 0.054 -0.056	0.200 0.065 0.089 0.132 0.096	0.104 0.093 0.075 0.086 0.057	0.059 0.052 0.038 0.045 0.064	0.079 0.067 0.068 0.065 0.050	0.047 0.042 0.036 0.023 0.027	0.019 0.014 0.023 0.019 0.033	0.022 0.020 0.013 -0.002	-0.002
	20	0.115 0.100 0.057 -0.047 -0.009	0.208 0.071 0.138 0.145 0.101	0.094 0.094 0.091 0.091	0.061 0.045 0.034 0.064	0.080 0.073 0.059 0.067 0.067	0.036 0.037 0.026 0.026	0.021 0.009 0.017 0.022 0.026	0.023 0.016 0.023 0.008	0.008
	19	0.135 0.068 0.029 -0.029	0.200 0.091 0.182 0.164 0.108	0.100 0.101 0.076 0.089 0.071	0.057 0.045 0.035 0.035	0.080 0.072 0.064 0.056 0.055	0.043 0.024 0.025 0.025	0.017 0.009 0.004 0.019	0.020 0.018 0.016 0.015	0.015
	18		0.219 0.111 0.204 0.190 0.122		0.070 0.052 0.047 0.038 0.074	0.097 0.087 0.076 0.064 0.053	0.054 0.036 0.035 0.017 0.020	0.020 0.017 0.010 0.012 0.010	0.017 0.021 0.013 0.013	0.013
	17	0.007 0.227 0.151 0.091 0.071	0.200 0.183 0.176 0.211 0.150		0.059 0.071 0.052 0.017	0.129 0.112 0.095 0.078 0.088	0.053 0.070 0.065 0.035 0.035	0.021 0.021 0.021 0.021	0.021 0.021 0.021 0.021	0.021
	16	000000	000000	000000	000000	000000	000000	000000	000000	0.000
PEBD	Service	Under 1 1 2 3 4		0=0:0:		0=0.00	10.00 t	0=0:0:		0 -
- >	_ 3,	2 ← 5 € 4	98792	0 1 2 2 4	51 71 81 61	22 23 24	25 27 28 29	32 33 34 34	35 37 37 39 39	0 4 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

PTION: Selected Reserve Net Separation Rates
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member exits the status (due to non-retirement causes) offset by the rate that a member reenters during the fiscal year.
For PEBD YOS greater than 15, if reentrant rate > loss rate, then reentrant is set equal to the loss rate (i.e., to not allow any negative net loss).
Blank cells should be considered a value of zero (0.000).

Officer Selected Reserve Paygrade Transfer Rates



Enlisted Selected Reserve Paygrade Transfer Rates



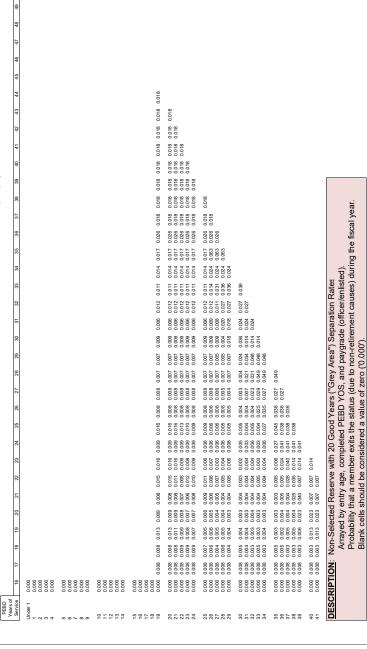
RIPTION: Selected Reserve Paygrade Transfer Rates
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member transfers from enlisted to officer during the fiscal year.
Blank cells should be considered a value of zero (0.000).

Officer Non-Selected Reserve with 20 Good Years Separation Rates (Non-Retirement Causes)

	49									
	48									
	47									
	46									
	45									
	44				0.026					
	43				0.026	0.026				
	45				0.026	0.026				
	41				0.026	0.026				
	40				0.026	0.026				
By Entry Age	38				970.0	0.026 0.026 0.026 0.026				
ByEn	38				0.026	0.026 0.026 0.026 0.026	0.026			
	37				0.026	0.026 0.026 0.026 0.026	0.026			
	36				0.026	0.026 0.026 0.026 0.026 0.026	0.026 0.026 0.026			
	35				0.026	0.026 0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026			
	æ				0.026	0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026			
	33				0.026	0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026	0.026		
	32				0.026	0.026 0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026	0.026		
	31				0.026	0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.028	0.026		
	30				0.026	0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026		
	53				0.026	0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026	0.026 0.026 0.026 0.026 0.026		
	28				0.013	0.013 0.013 0.047 0.018	0.017 0.016 0.016 0.016 0.016	0.016 0.016 0.016 0.016	0.016	
	27				0.030	0.034 0.034 0.028 0.028	0.017 0.020 0.022 0.013 0.013	0.016 0.016 0.016 0.016	0.016	
	98				0.031	0.031	0.022 0.028 0.032 0.011	0.0000	0.010	
	. 52				0.022	0.022 0.033 0.028 0.025	0.029 0.015 0.013 0.009	0.007 0.005 0.005 0.005	0.033	
	3 24				0.026	0.026 0.022 0.025 0.025	0.021 0.023 0.016 0.014	0.007	0.026 0.026 0.026 0.026	
	23				0.021	0.027 0.022 0.022 0.022 0.030	3 0.0022 0.021 0.015 1 0.011	0.004 0.003 0.005 0.005	3 0.004 3 0.012 5 0.021 0 0.013	0.013
	1 22				5 0.115	5 0.015 5 0.028 1 0.032 6 0.031 3 0.025	2 0.023 1 0.022 1 0.019 6 0.014 6 0.008	0.005 0.004 0.003	2 0.003 2 0.016 2 0.020 2 0.021	2 0.021
	20 21				7 0.035	7 0.035 2 0.041 9 0.026 3 0.033	6 0.032 7 0.021 9 0.021 6 0.016 2 0.016	7 0.011 8 0.009 1 0.006 1 0.006	1 0.012 1 0.012 1 0.012 1 0.012	1 0.012
	19 2				4 0.037	4 0.037 4 0.042 7 0.029 4 0.043	1 0.016 4 0.037 1 0.019 5 0.026 8 0.022	3 0.017 5 0.001 5 0.008 5 0.011 9 0.011	9 0.011 8 0.011 8 0.011 8 0.011	8 0.011
	18 1				8 0.034	8 0.034 8 0.034 8 0.034 8 0.037 8 0.044	8 0.031 8 0.024 8 0.031 8 0.035	8 0.013 8 0.015 8 0.005 8 0.009	8 0.009 8 0.007 8 0.008 8 0.008	8 0.008 8 0.008
	17				18 0.018	88 0.018 18 0.018 18 0.018 18 0.018	8 0.018 18 0.018 18 0.018 18 0.018	18 0.018 18 0.018 18 0.018 19 0.018	18 0.018 18 0.018 18 0.018 18 0.018	18 0.018 18 0.018
	16	88888	88888	88888	00000	00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 00 00 00 00 00 00 00 00 00 00 00	00 0.018
- 70	Ш	000000	000000	000000	000000	000000	000000	000000	000000	0.000
PEBD	Service	Under 1 2 2 3 4 4	10 W M M	0 = 2 5 5	2	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	25 27 28 29	3323333333	33 33 33 33 35 36	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

DESCRIPTION: Non-Selected Reserve with 20 Good Years ("Grey Area") Separation Rate:
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member exits the status (due to non-retirement causes) during the fiscal year.
Blank cells should be considered a value of zero ("0.000").

Enlisted Non-Selected Reserve with 20 Good Years Separation Rates (Non-Retirement Causes)



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Officer Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Rates

!	47									
:	94									
I •	42									
	44									
	43				0.016					
:	42				0.016 0	0.016				
	14				0.016 0	0.016 0.016				
	9				0.016 0	0.016 0				
ry Age	88				0.101 0	0.085				
By Entry Age	æ				0.076	0.036				
	37				920.0	0.122 0.105 0.024 0.024	0.024			
	36				0.087	0.132 0.070 0.074 0.048 0.048	0.048			
ı	32				0.074	0.151 0.116 0.051 0.129 0.078	0.007			
	স্ত				0.071	0.109 0.099 0.111 0.135	0.037 0.037 0.037			
	83				0.060	0.093 0.134 0.126 0.126	0.029			
l	33				0.054	0.070 0.093 0.093 0.093	0.104 0.144 0.043 0.043	0.043		
i	33				0.072	0.082 0.085 0.098 0.098	0.110 0.112 0.157 0.008	0.008		
	8				0.074	0.075 0.098 0.099 0.111	0.127 0.105 0.150 0.127	0.007		
	R				0.037	0.086 0.086 0.083 0.053	0.097 0.116 0.117 0.110	0.028 0.028 0.028		
	28				0.047	0.070 0.062 0.098 0.144 0.081	0.106 0.121 0.136 0.165 0.236	0.167 0.086 0.009 0.009 0.009		
	27				0.055	0.077 0.096 0.095 0.072	0.116 0.102 0.190 0.137 0.219	0.170 0.042 0.042 0.042	0.042	
	8				0.044	0.090 0.083 0.085 0.095	0.110 0.110 0.185 0.147 0.252	0.197 0.146 0.059 0.059	0.059	
	52				0.054	0.073 0.071 0.086 0.081 0.102	0.094 0.101 0.185 0.119 0.267	0.189 0.136 0.129 0.044	0.044 0.044 0.044	
	24				0.048	0.077 0.089 0.075 0.112 0.101	0.088 0.116 0.210 0.142 0.271	0.176 0.159 0.157 0.150 0.140	0.051 0.051 0.051 0.051	
	8				0.047	0.068 0.080 0.090 0.105 0.095	0.105 0.098 0.227 0.148 0.380	0.192 0.160 0.196 0.176 0.152	0.193 0.048 0.048 0.048	
	23				0.038	0.085	0.106 0.110 0.198 0.146	0.201 0.139 0.240 0.164	0.189 0.053 0.053 0.053	0.053
	21				9 0.028	9 0.052 1 0.063 1 0.066 1 0.067	0.093 0.105 0.105 0.107	0.140 0.126 0.126 0.132 0.148	0.133 0.115 0.035 0.035	5 0.035
	19 20				5 0.029	4 0.059 6 0.064 7 0.057 8 0.057 8 0.057	3 0.062 1 0.057 8 0.084 1 0.083 6 0.097	9 0.085 9 0.114 7 0.120 2 0.101 0 0.139	7 0.144 3 0.161 8 0.134 7 0.035	6 0.035 6 0.035
	18				2 0.025	9 0.054 6 0.056 3 0.047 0 0.058 7 0.048	9 0.053 6 0.061 0 0.058 8 0.061 2 0.076	8 0.099 2 0.087 2 0.102 1 0.110	5 0.137 1 0.164 3 0.123 0 0.148 0 0.147	5 0.026 5 0.026
	17				38 0.022	38 0.049 37 0.056 38 0.050 33 0.047	15 0.049 15 0.056 15 0.060 15 0.072	15 0.078 15 0.061 15 0.092 15 0.112 15 0.091	15 0.085 15 0.121 15 0.133 15 0.210 15 0.130	5 0.095 5 0.095
		88888	88888	88888	8900	00 0.068 00 0.037 00 0.065 00 0.063	00 0.045 00 0.045 00 0.045 00 0.045	00 0.045 00 0.045 00 0.045 00 0.045	00 0.045 00 0.045 00 0.045 00 0.045 00 0.045	00 0.045
		000000	00000	00000	00000	000000	00000	00000	00000	0.000
PEBD Years of	Service	Under 1 2 3 4	40000	0 = 2 = 4	15 17 18 19	20 23 24 24	25 27 28 29 29	332 332 4433 3433	35 37 38 39 39	4 4 1

RIPTION: Selected Reserve to Non-Selected Reserve with 20 Good Years ("Grey Area") Transfer Rates Arrayed by entry age, completed PEBD YOS, and paygrade (officerlenlisted).

Probability that a member transfers to the Grey Area from the Selected Reserve status during the fiscal year.

Blank cells should be considered a value of zero ("0.000").

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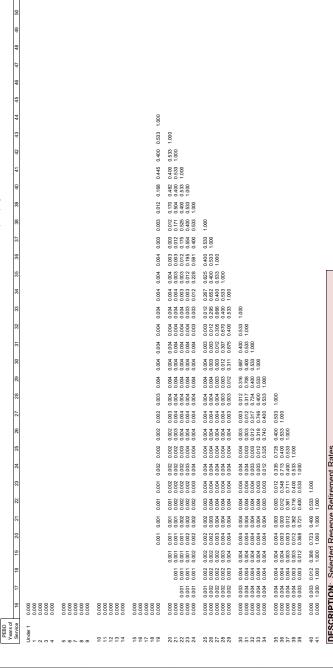
Enlisted Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Rates

	47									
	46									
	45									
	44									
	43				0.031					
	42				0.031 0.	0.031				
	41				0.031 0	0.031 0				
	40				0.031 0	0.031 0				
By Entry Age	33				0.031 0	0.031 0				
3y Ent	38				0.063	0.005				
_	37				0.067	0.078	2000			
	36				0.065	0.089 0.091 0.0112 0.010	0.010			
	32				0.044	0.111 0.099 0.089 0.144	90000			
	8				0.051	0.090 0.110 0.107 0.121 0.130	0.003			
	33				0.059	0.064 0.102 0.117 0.138 0.123	0.107 0.079 0.003 0.003			
	32				0.052	0.094 0.120 0.120 0.115	0.114 0.042 0.042 0.042	0.042		
	31				0.033	0.084 0.097 0.112 0.119 0.113	0.131 0.109 0.143 0.072 0.003	0.003		
	30				0.048	0.092 0.082 0.099 0.138 0.097	0.133 0.099 0.093 0.122 0.073	0.006		
	83				0.032	0.096 0.098 0.118 0.106	0.125 0.128 0.107 0.107	0.067 0.006 0.006 0.006		
	28				0.044	0.075 0.085 0.087 0.120 0.111	0.087 0.105 0.124 0.108 0.109	0.148 0.078 0.006 0.006		
	27				0.051	0.092 0.098 0.080 0.107 0.119	0.092 0.111 0.118 0.108	0.130 0.063 0.063 0.063	0.063	
	98				0.043	0.083 0.085 0.109 0.093	0.104 0.104 0.082 0.120	0.129 0.230 0.079 0.011	0.011	
	52				0.041	0.079 0.089 0.108 0.093	0.095 0.096 0.105 0.083 0.116	0.132 0.138 0.226 0.128 0.096	0.010	
	24				0.047	0.082 0.086 0.093 0.110 0.106	0.086 0.091 0.096 0.085 0.120	0.107 0.136 0.219 0.148 0.148	0.080 0.007 0.007 0.007	
	23				990'0	0.066 0.093 0.089 0.099 0.097	0.089 0.095 0.089 0.089	0.106 0.194 0.126	0.164 0.063 0.003 0.003	
	22				0.048	0.091 0.095 0.111 0.090	0.097 0.094 0.084 0.084	0.101 0.095 0.172 0.147 0.150	0.154 0.143 0.050 0.050 0.050	0.050
	21				0.051	0.090	0.087 0.098 0.098 0.088	0.088	0.174 0.139 0.078 0.003	0.003
	3 20				0.056	0.089 0.095 0.095 0.095	0.084	0.100 0.086 0.147 0.091	0.226 0.152 0.193 0.146	3 0.047
	18 19				9 0.050	0.095 0.095 0.085	3 0.086 4 0.080 5 0.077 7 0.094	0.092 0.083 0.136 0.099 0.081	0.145 0.266 0.191 0.173 0.160	7 0.038
	17 18				3 0.039	3 0.094 0 0.091 8 0.107 1 0.085	3 0.078 3 0.084 1 0.080 6 0.073 0 0.087	0 0.101 4 0.088 4 0.077 4 0.080	4 0.116 4 0.220 4 0.281 4 0.181 4 0.138	4 0.077
	16 1	00000	00000	00000	00000	0 0.063 0 0.070 0 0.096 0 0.098 0 0.081	0 0.083 0 0.093 0 0.081 0 0.110	0 0.080 0 0.074 0 0.074 0 0.074	0 0.074 0 0.074 0 0.074 0 0.074	0 0.074
~	Ц	000000	00000	000000	000000	000000	00000	00000	00000	0.000
PEBD Years of	Service	Under 1 2 2 3 4 4	40 W M M	0 1 2 5 4	5 5 7 8 5 5 6 7 8 5	22 2 2 3 5 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	52 53 53 54 58 58	333 333 34 34 34 34 34 34	33 34 8 3 3 3 3 4 8 3 3 4 8 3 3 4 8 8 8 3 4 8 8 8 8	0 4 1

IPTION: Selected Reserve to Non-Selected Reserve with 20 Good Years ("Grey Area") Transfer Rates Arrayed by entry age, completed PEBD YOS, and paygrade (office/fenlisted). Probability that a member transfers to the Grey Area from the Selected Reserve status during the fiscal year. Blank cells should be considered a value of zero (0.000').

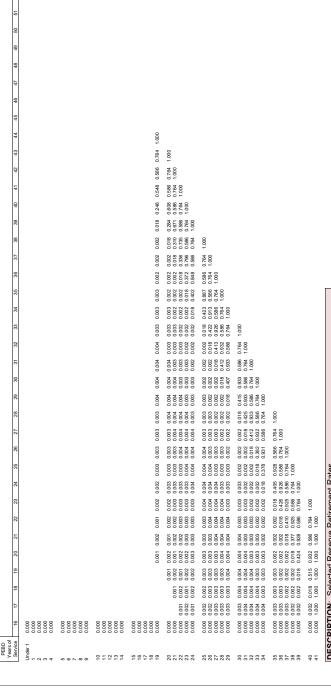
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Officer Selected Reserve Retirement Rates



Propagation of the property of

Enlisted Selected Reserve Retirement Rates



Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Probability that a member retires during the fiscal year.
Rates for all ages except 59-60 are constant across all years of service.
Ages 59-60 were graduated ('smoothed') by age and years of service.
Blank cells should be considered a value of zero ('0.000').

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Selected Reserve Disability Retirement Rates

By Disability Type and Paygrade

PEBD Years of	Permanent		Temporary	
Service	Officer	Enlisted	Officer	Enlisted
Under 1	0.00000	0.00008	0.00000	0.00028
1	0.00000	0.00017	0.00000	0.00021
2	0.00000	0.00058	0.00000	0.00038
3	0.00000	0.00074	0.00000	0.00050
4	0.00065	0.00079	0.00014	0.00055
5	0.00065	0.00110	0.00026	0.00065
6	0.00063	0.00129	0.00039	0.00070
7	0.00070	0.00111	0.00051	0.00073
8	0.00069	0.00122	0.00058	0.00071
9	0.00074	0.00165	0.00057	0.00078
10	0.00096	0.00201	0.00055	0.00093
11	0.00098	0.00227	0.00047	0.00115
12	0.00076	0.00242	0.00042	0.00124
13	0.00075	0.00253	0.00039	0.00115
14	0.00092	0.00247	0.00037	0.00106
15	0.00099	0.00224	0.00035	0.00109
16	0.00087	0.00210	0.00039	0.00102
17	0.00077	0.00210	0.00049	0.00101
18	0.00089	0.00220	0.00048	0.00100
19	0.00126	0.00292	0.00046	0.00107
20	0.00177	0.00384	0.00052	0.00109
21	0.00215	0.00403	0.00043	0.00118
22	0.00228	0.00486	0.00043	0.00140
23	0.00188	0.00582	0.00060	0.00149
24	0.00175	0.00628	0.00090	0.00153
25	0.00237	0.00669	0.00101	0.00156
26	0.00302	0.00706	0.00096	0.00172
27	0.00342	0.00745	0.00086	0.00185
28	0.00333	0.00810	0.00088	0.00178
29	0.00317	0.00831	0.00090	0.00164
30	0.00331	0.00874	0.00091	0.00156
31	0.00327	0.00907	0.00090	0.00151
32	0.00321	0.00869	0.00094	0.00142
33	0.00311	0.00786	0.00096	0.00132
34	0.00259	0.00744	0.00091	0.00127
35	0.00157	0.00785	0.00087	0.00132
36	0.00000	0.00807	0.00093	0.00144
37	0.00000	0.00753	0.00108	0.00155
38	0.00000	0.00643	0.00120	0.00158
39	0.00000	0.00504	0.00127	0.00152
40	0.00000	0.00000	0.00000	0.00000
41	0.00000	0.00000	0.00000	0.00000

DESCRIPTION: Selected Reserve Disability Retirement Rates

Arrayed by disability type (Permanent/Temporary), completed PEBD YOS,

and paygrade (officer/enlisted).

Probability that a member receives a disability retirement during the fiscal year

Non-Selected Reserve with 20 Good Years Retirement Rates

By Paygrade

Age	Officer	Enlisted
17	0.000	0.000
18	0.000	0.000
19	0.000	0.000
20	0.000	0.000
21	0.000	0.000
22	0.000	0.000
23	0.000	0.000
24	0.000	0.000
25	0.000	0.000
26	0.000	0.000
27	0.000	0.000
28	0.000	0.000
29	0.000	0.000
30	0.000	0.000
31	0.000	0.000
32	0.000	0.000
33	0.000	0.000
34	0.000	0.000
35	0.000	0.000
36	0.000	0.000
37	0.000	0.000
38	0.000	0.000
39	0.000	0.000
40	0.000	0.000
41	0.001	0.000
42	0.000	0.000
43	0.002	0.000
44	0.002	0.000
45	0.001	0.000
46	0.001	0.000
47	0.001	0.000
48	0.001	0.000
49	0.001	0.000
50	0.002	0.000
51	0.001	0.000
52	0.002	0.000
53	0.001	0.000
54	0.001	0.000
55	0.001	0.000
56	0.000	0.000
57	0.000	0.000
58	0.001	0.001
59	0.470	0.450
60	0.950	0.930
61	0.289	0.303
62	0.199	0.186
>62	1.000	1.000

DESCRIPTION: Non-Selected Reserve with 20 Good Years ('Grey Area') Retirement Rates Arrayed by age and paygrade (officer/enlisted).

Probability that a member retires from the Grey Area during the fiscal year.

Officer Selected Reserve Average Points Per Year

	>62	4									
	62	¥ ¥									
	61	2 2 2									
	09	47 47 47 47									
	29	* * * * *									
	28	* * * * *	47								
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	22	* * * * *									
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	53		<u> </u>								
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	47 4			88 98 98 98 98 98 98 98 98 98 98 98 98 9							
	45 46			71 66 98 56 109 88 102 81 96 79							
	44			89 7 82 9 97 10 82 10							
	43 4		71 8 91 7 86 7 69 9	002 80 80 86 86 86 86 86		98					
	42 4		76 78 78 78 78 90 86	110 102 102 104 86		93					
	41 2			F 88 88 50 50 50 50 50 50 50 50 50 50 50 50 50	107 107 88 88 88	85 85					
	40 4		26 24 87 8 85 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		08 8 10	97 8					
m	39 4			993 88	87 98 82 888 995 10	90 87 87 87 87					
Entry Age	38 3			93 93 94 97 97 98		97 89 89 105 80 80 80 80 80 80 80 80 80 80 80 80 80	901				
By	37		82 82 84 84 84 84 84 84 84 84 84 84 84 84 84		88888		93				
	38	997	88 87 88	288888	84888	9888	888				d). Reserve during a fiscal year. n due to a "half-mobilization"
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	8			38888							ing a
	33		8 8 8 8 8				99 102 119 119 119 119	2			e dur
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	30	837888	88848	93	88884	97 88 50	88484	8 4 4 4			Selec redu
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	27	131 1 131 1 107 1	108 100 95 99	95 99 94	103 98 101 100 97	98 1 97 1 102 1 97	94 1 97 1 93 1 97 1	102 101 115 105 102	886		l payg cumu ar aft
	58	22225	108	105 50 105 105 105 105 105 105 105 105 1	105 107 105 105	105 105 105 101	99 101 101	113	999		Yeal S, and es) ad appe
	25	142 142 1	1122	1058 105 105 105 105 105 105 105 105 105 105	265 20	105 50 10 10 10 10 10 10 10 10 10 10 10 10 10	80 10 10 10 10 10 10 10 10 10 10 10 10 10	101 97 105 105 105	424 104 104		d Per y YOS irpose ibove
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	17 1	87 11 87 11 87 11	135 148 152 135 135 135 135 135 135 135 135 135 135	14 25 25 25 25 25 25 25 25 25 25 25 25 25	115 119	13882	100 100 100 100 100 100 100 100 100 100	102 22 133 11 11 11 11 11 11 11 11 11 11 11 11	88 10 10 10 10 10 10 10 10 10 10 10 10 10	88	o · · · · ·
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Enlisted Selected Reserve Average Points Per Year

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	62 >62	8 8									
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	9 69	0000									
	58 5	88888	9								
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	22	88888									
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	53	88888	88888	8							
	52	88888	88888	8 8							
	21	88888	88888	8 8 8							
	20	88888	88888	8888							
	49	8 8 8 8 8	88888	8 8 8 8 8							
	48	88888	88888	8 8 8 8 8	8						
	47	88888	88888	88888	8 8						
	46	88888	8 8 8 8 8	88888	93 33						
	45	105 105 105 105	105 105 105 105	105 105 105 105	105 105 105						
	44	92 115 103 109	28 28 39 20	101 121 128	128 128 128 128						
	43	105 102 87 94 100	103 103 136 148	130 177 118 97 97	8 8 8 8 8 8 5 5 5 5	8					
	42	71 111 91	93 84 116 102	108 120 112 93 112	8 2 2 2 3	9 9 4 4					
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	36	102 99 93 93	97 98 101 102	20 20 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30	96 97 97	101 97 97	97				
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	32	20 20 50 50 50 50 50 50 50 50 50 50 50 50 50	8 7 5 5 5 5 10 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	103 101 101 102	97 101 98 98	101 001 88	97 97 97 97	97			
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	27	121 107 101 97	97 93 98 100 105	101 103 103	102 100 99 97	97 99 104 103	101 97 102	86 00 00 00 00 00	100		
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	21	107 108 108 108 108	6 1 2 2 4 5 10 2 4 5 5	20 40 10 10 10 10 10 10 10 10 10 10 10 10 10	2 8 8 8 0	101 101	102 103 103 103	25 50 88 52 20 50 88 52	<u> </u>	<u>\$</u> \$	
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	19	135 109 107 107	102 107 107	50 20 20 20 20 20 20 20 20 20 20 20 20 20	2 0 0 0 8 8	55 25 25 25 25 25 25 25 25 25 25 25 26 25 25 26 25 25 26 26 26 26 br>26 26 26 br>26 26 26 26 26 26 26 26 26 26 26 26 26 26 2	2 4 5 2 5 5 5	25288	8 6 5 5 5	5 12	
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	17	21 12 12 14 16 16	P 201 100 100 100 100 100 100 100 100 100	50 10 10 10 10 10 10 10 10 10 10 10 10 10	70 00 00 00 00 00 00 00 00 00 00 00 00 0	1108 120	106 2 00 1 00 00 00 00 00 00 00 00 00 00 00 0	5 8 8 8	11211	112	,
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PE	Se	Under 2 3 4	v & v & w	0 1 2 2 4	15 17 18 19	82222	28238	8 2 2 2 2	38 37 88 88	04 4	l

DESCRIPTION: Selected Reserve Average Points Earned Per Year
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Annual retirement points (for benefit purposes) accumulated by a Selected Reserve during a fiscal year.
Annual retirement points Earned Per Year above appear after a 21.1% reduction due to a "half-mobilization" assumption.
Blank cells should be considered a value of zero ("0").

Officer Selected Reserve Career Points Adjustment

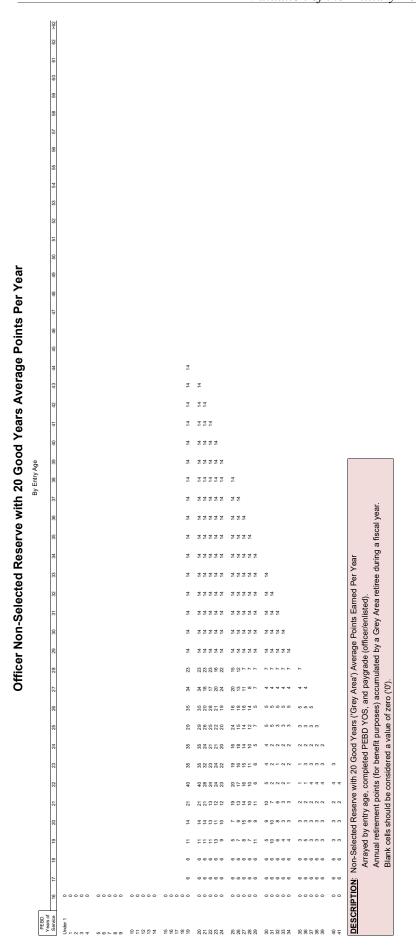
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61	1.606 1.6								
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54	44040	1.071 1.420 1.420 1.420 1.420							
53	-00	1.216 1.022 0.620 1.000 1.000	1.000						
52	000.1 000.1 000.1 000.1 000.1	1.051 1.055 1.055 1.055	1.055						
51	1.000 1.000 0.968 1.013	0.998 1.062 0.951 0.951 0.951	0.951						
9	0.999 0.999 1.013 1.000	1,031 1,000 1,000 1,000	000.1						
49	1.000 0.914 1.018 1.019	0.978 1.049 1.052 0.987	1,025 1,025 1,025 1,025						
48	-	1,000 1,049 1,031 1,009	1.026	1.026					
47		1.015 1.013 1.011 1.002 1.002	0.979 1.048 1.091 1.091	1.091					
46		1.023 1 1.042 1 1.016 1 0.981 1		1.060					
45		1.023 1. 1.033 1. 1.028 0.	1.000 1.000 1.006 1.006 1.013	0.995 1. 0.995 1. 0.995 1.					
44		1,000	0.994 0.1.040 1.1016 1.1027 0.1.016 1.1016 1	1.006 1.052 1.039 0.039 1.039					
43	0.4.0.0.4	0.971 1.0 1.072 1.0 0.942 1.0 1.089 1.0	0.999 0.9 1.009 1.0 1.004 1.0 1.013 1.0	1.023 1.0 1.035 1.0 1.028 1.0 0.973 1.0	0.973				
42	_	1.004 0.9 0.994 1.0 1.042 0.9 0.995 1.0	1.020 0.9 1.024 1.0 1.010 1.0 1.010 0.9		0.977 0.9				
14	-00-0			75 1.000 18 1.009 78 1.009 24 1.058 55 0.977					
40	00 1.000 08 0.983 86 1.043 24 0.985 99 1.031	26 1.003 67 1.048 81 0.992 17 0.975 27 0.978	08 1.057 94 0.987 27 0.998 99 0.992 09 1.014	02 0.975 03 1.018 05 0.978 97 1.024 11 1.055	21 1.030 01 1.030 01 1.030				
39 4	22929	77 1.026 39 0.967 39 0.981 18 1.017 89 1.027	11 1.008 17 0.994 13 0.999 10 1.009	22 1.002 36 1.003 30 0.997 38 1.011	24 0.921 18 0.901 37 0.901 37				
	1.0.0.1.1	9 0.987 1 1.009 3 1.029 8 1.018 8 0.989	3 0.991 3 1.017 6 1.008 0 1.013 8 1.000	8 1.002 6 1.006 9 0.976 4 1.000 4 1.028	1 0.984 8 1.018 5 1.097 1 1.097	-			
7 38	9-9	0.999 1.053 0.998	7 1.003 3 0.996 3 1.010 2 1.008	3 1.008 1 0.999 7 0.994 1 1.024	7 0.991 0 0.948 1 1.035 5 0.981	0.981			
37	1.086 1.036 1.026 1.005 1.013	3 1.029 1.029 1.029 1.050	1.027 1.003 1.003 1.003	3 1.008 1.004 1.021 1.020	2 0.987 9 0.980 4 1.021 5 0.956 7 0.965	0.965			
36	55555	1.003	1.035 0.960 1.003 1.011	1.006 0.998 0.984 1.002	1.009 1.009 1.004 0.995	040:1.040			
35	44494	0.995 0.997 1.005 1.026	0.982 1.011 1.019 0.996 1.004	0.992 1.015 0.996 1.008	1.002 0.996 0.997 1.009	0.955 0.980 0.980 0.980			
¥	5555	1.000 0.997 0.980 1.032 1.015	1.019 0.993 0.975 1.000 0.991	1.000 0.995 0.997 1.001 0.989	1.012 0.985 1.005 0.983 0.989	1.005 0.960 1.046 1.046			
33	59559	0.981 1.004 1.019 1.006	1.005 0.999 0.999 1.023	0.978 0.996 0.995 1.006 0.982	1.018 0.983 0.990 1.005 0.993	1.008 0.990 0.942 0.962 0.962	0.962		
32	1.060 1.018 1.012 0.992 1.001	1.000 0.992 1.028 1.010 0.988	0.968 1.013 1.022 0.993	0.993 1.003 1.003	1.007 0.987 1.006 0.969 0.998	0.994 0.991 0.945 0.945	0.856		
31	1.024 1.043 1.000 1.008 0.980	0.995 1.013 1.026 1.010 0.997	1.007 0.986 0.973 0.983 1.001	1.026 1.000 0.998 0.996 0.999	1.013 0.981 0.993 0.997	1.001 1.000 0.998 0.998	1.003		
90	1.039 0.999 1.004 1.010	0.984 1.000 1.026 1.033	0.983 0.983 1.003 0.988	1.012 1.016 1.011 0.983 0.985	0.987 0.988 1.009 0.996	1.002 0.981 0.970 0.996 0.963	0.909 1.016 1.016		
83	1.000	0.990	1.020 1.006 0.996 1.006	1.003 0.998 0.995 0.989	0.988 0.990 0.990 0.998 7.975	0.987 0.983 0.979 0.970 0.959	0.939 0.917 0.924 0.924 0.924		
28			0.996 0.998 0.998 0.984			0.994 0.997 0.975 0.975 0.975		0.884	
27			1.003 0.995 0.988 0.988 0.999			0.989 0.993 0.980 0.993		0.876 0.876	
58		0.980 0 0.989 1 0.997 0 1.001 1	0.997 1 0.991 0 1.006 0 0.994 1	1.000 1 1.002 0 0.997 0 0.998 0	0.995 0 0.995 0 0.993 1 0.996 0		0.937 0 0.995 0 1.005 0 1.026 0	0.841 0	
52		0.994 0. 0.995 0. 1.012 0. 1.015 1.	0.989 0. 0.998 1. 0.996 0.	1.008 1. 0.992 0. 0.994 0.	0.997 0. 0.988 0. 0.993 0. 0.997 0.		0.968 0. 0.997 1. 1.003 1.	0.898 0. 1.009 0. 1.009 0.	
54		0.987 0.001 0.991 0.01 1.002 1.013	1,001 1,002 1,007 0,996 0,996 1,002	0.997 1,000 0,100 0,994 0,000 0,000	0.998 0. 0.997 0. 0.996 0. 0.992 0.		0.994 0. 0.980 0. 0.997 0. 1.001 1.	0.990 0. 0.940 1. 0.797 1.	
23	-0	0.992 0.9 0.976 0.5 1.005 1.0 1.013 1.0	0.998 1.0 0.994 1.0 1.004 0.5	1,005 0.9 0.998 1.0 1,001 0.9 0.996 0.9	0.994 0.5 0.993 0.5 0.997 0.5 0.995 0.5	0.994 0.5 0.995 0.5 0.995 0.5 0.975 0.5	0.992 0.9 0.999 0.9 0.993 0.9 0.992 0.9	0.997 0.5 1.002 0.5 1.053 0.5 0.928 0.7	9000
22	2 1 9 2 1				0.997 0.9 0.995 0.9 0.993 0.9 0.991 0.9	0.995 0.9 0.992 0.9 0.992 0.9 0.981 0.9			0 803 0
	00000	97 0.997 00 0.971 00 0.995 08 0.995 10 0.999	09 1.008 91 1.000 93 1.002 95 1.002	94 0.999 95 0.998 90 0.997 88 0.995			76 0.996 88 1.005 99 1.012 80 0.976 95 0.999	85 0.976 95 0.998 95 0.955 15 0.918 62 0.984	
20 21	00 1.000 01 1.006 09 0.978 09 0.996	000 1000 37 1.000 39 1.008	39 1.009 39 0.991 36 0.993 30 0.985	37 0.994 32 0.995 36 0.996 39 0.988	0.990 37 0.983 36 0.989 37 0.989		55 0.976 32 0.988 79 0.999 32 0.995	36 0.985 34 0.995 30 1.015 30 0.962	35 1 043
	00 1.000 60 1.009 7 1.009	1 0.994 1 0.994 19 0.997 15 0.999	0.989 0 1.012 0 0.989 15 0.996	7 0.997 16 0.992 13 0.986 13 0.989	0 0.997 0 0.987 14 0.987 11 0.984		13 0.965 14 0.992 17 0.979 12 0.992 19 1.001	19 0.998 15 0.984 10 0.990 12 1.005	0.085
8 19		8 1.008 9 1.011 8 0.999 2 1.005 4 1.007	2 1.001 8 1.000 6 1.003 5 0.995 2 0.993	0.997 0.996 1 0.993 0 0.993	8 0.990 7 0.989 4 0.980 0 0.984		9 0.983 4 0.984 1 0.977 3 0.982 4 0.979	2 0.989 8 0.980 4 0.975 6 1.000 0 0.992	2000
18		1.008 1.008 1.008 0.994	0.992 1.006 0.995 0.995	0.990 0.981 0.986 0.986	0.988 0.984 0.980 0.990	0.984 0.981 0.992 0.989	0.979 0.981 0.983 0.984		0.047
17		1.025 0.997 1.006 0.993 1.012	0.986 1.007 1.000 1.000 0.961	0.995 0.978 0.959 0.959	0.975 0.985 0.979 0.983 0.971		0.983 0.886 1.000 0.994 0.986		000
16	000000	000000	000000	000000	000000	000000	000000	000000	000
Years of Service	der 1								
≭ຶຶ	Under 1 2 3 4	90700	0 1 2 2 4	15 17 18 19	20 22 23 24	25 27 28 29	31 32 33 34	35 37 38 39	40

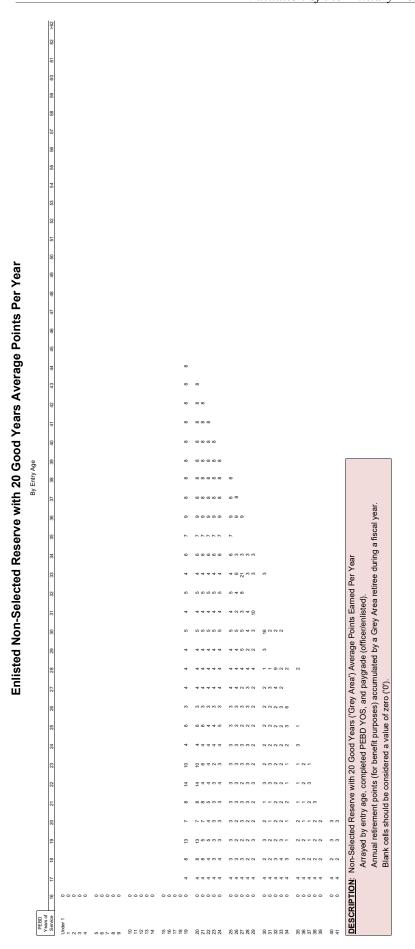
DESCRIPTION: Selected Reserve Career Points Adjustment
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Adjustment to Average Career Points for Selected Reserve members to capture the effect of losses (e.g., separation, retirement, transfer) during the fiscal year.

Enlisted Selected Reserve Career Points Adjustment

>62	1.093								
62	1.083								
61	1.093 1.093								
09	1.093 1. 1.093 1. 1.093								
26	1.093 1.0 1.093 1.0 1.093 1.0								
28		8							
22	33 1.093 33 1.093 33 1.093 33 1.093	33 1.090							
999		3 1.093 3 1.093 3							
		3 1.093 3 1.093 3 1.093							
1 22		11093							
54		1,093							
53		1.093 1.093 1.093	1:093						
52		1.769 1.769 1.769 1.769	1.769						
51	1.000 1.126 0.926 1.000 1.114	± ± ± ± ± ± ±	4 T T T T T T T T T T T T T T T T T T T						
90	1.000	0.770 0.770 0.770 0.770 0.770	0.770 0.770 0.770 0.770						
49	1.000 0.705 1.190 0.440 1.739	1.000 0.949 1.006 1.006	1,006 1,006 1,006 1,006						
48	1.134 1.000 1.000 0.868 0.868	0.868 0.868 0.868 0.868	0.868 0.868 0.868 0.868	0.868					
47		1.028 1.030 1.030	88888	1.10					
46		0.858 0.550 1.000 1.266		1.058					
45		1.102 0.726 1.169 1.905	1.054 1.054 1.054 1.054						
44	•	1.101 1 1.015 0 1.061 1 0.977 0	1.309 1 1.023 1 0.953 1 0.953 1	0.953 1 0.953 1 0.953 1 0.953 1					
43		1.015 1. 0.977 1. 0.960 1. 1.036 0.	1.035 1. 1.041 1. 0.994 0. 1.016 0. 0.977 0.	0.987 0. 1.074 0. 1.074 0. 1.074 0.	1.074				
42		0.979 1, 1.022 0, 1.065 0, 0.981 1, 1.018 0,	1.076 1.018 1.040 1.040 1.002	-	1.013				
41	0.993 1.0 0.971 1.0 0.986 1.1	1,000 1,002 1,002 1,003 1,033 1,033	0.976 1.0 0.998 1.0 0.997 1.0 1.0 1.2 1.0	0.999 1.010 1.005 1.013 1.127	1127 11				
40									
38	51 1.004 35 1.012 22 1.008 36 0.996 77 0.984	33 1.001 13 1.000 24 1.036 19 1.018	55 1.011 12 1.051 39 0.999 37 1.004 32 1.007	00 1.029 10 0.974 35 1.017 22 0.978 18 1.006	25 1.031 14 1.031 14 1.031				
	1 1.051 6 1.035 6 0.986 9 1.007	1 1.008 2 0.983 8 1.013 9 1.004	5 0.965 5 1.012 5 0.999 3 0.987 9 0.992	2 1,000 4 1,010 0 0,995 7 1,002 3 1,018	4 0.965 5 0.914 7 0.914 7 0.914	4			
7 38	7 1.034 7 1.036 9 1.016 0.989	1 0.991 3 1.008 1 0.999 1 0.999	0.985 0.095 1.015 0.993 0.993	0.992 0.994 1.000 0.997 1.013	1.014 1 0.975 5 0.917 0 0.917	0.917			
37		0.994 0.994 0.994 0.991	1.006 1.006 1.016 1.016	0.989	1.009 1.0995 1.0960 1.0960	0.960			
36		0.998 0.998 1.005 0.981	1.015	1.004 1.010 1.000 1.000	0.991 0.998 0.981 0.979	0.979			
35	_	1.002 1.027 0.993 0.991	1.001 1.000 0.998 0.985	0.986 0.995 1.000 0.984 0.998	0.987 0.985 0.995 1.016 0.996	0.968 0.968 0.968			
×	0.993 1.033 1.016 1.008 0.994	1.006	0.996 0.997 1.001 1.000 0.994	0.985 1.012 0.991 0.996 0.994	1.003 0.983 0.994 1.006 0.985	0.999 0.952 0.952 0.952			
33	0.999 1.030 1.010 1.010	1.009 1.013 1.013 1.009	1.003 0.998 0.999 1.009 0.994	0.995 1.008 0.998 0.995 0.995	0.996 0.985 0.991 0.993	1.001 0.991 1.106 1.106	1.106		
32	1.075 1.030 1.012 1.010 0.993	0.996 1.006 1.014 0.995 0.986	0.998 1.000 1.009 1.009	0.993 0.990 1.001 1.000	1.004 0.979 0.985 1.010 0.988	0.982 1.012 0.996 1.014 1.014	1.014		
31	1.038 1.026 1.010 1.002	0.990 0.998 1.014 0.996 1.002	1.010 0.988 1.005 0.996 1.008	1,000 0.985 1,000 0.992 0.983	0.994 0.997 0.990 1.002 0.992	0.998 1.009 0.986 0.904	0.904		
30	1.086 1.022 1.022 0.999	0.992 0.997 1.020 1.007	1.003 0.996 1.004	1.002 1.000 0.997 0.991 0.998	0.998 0.976 0.990 0.991	1.000 0.992 1.002 0.995 0.987	1.03 1.03 1.03 1.03 1.03		
23	1.067 1.037 1.016 1.012 1.004	1.009 1.009 1.008 1.004	0.997 1.002 0.999 0.995 0.997	1.000 1.000 0.998 0.997	0.984 0.982 0.994 1.001	0.996 0.992 0.999 0.991	0.989 1.032 1.032 1.032		
28				1.007 0.993 1.005 0.998 0.993	0.990 0.996 0.993 1.001	0.995 1.004 0.998 0.991		1.019	
27		0.993 0.994 0.995 0.998	0.996 0.995 0.999 1.003				0.993 0.998 1.040		
92	_	0.999 0.996 0.996 0.996 0.996	1.002 0.997 0.002 1.002	0.987 0.996 0.995 0.999 0.989	0.991 0.992 0.992 0.996		0.995 0.996 0.981 0.001 1.001	1.092 1.092 1.092 1.092	
25		1.011 1 0.998 0 0.994 0 1.007 1	1.009 1.006 0.991 0.996 1	0.997 0 0.996 0 0.999 0 0.998 0	0.999 0 0.982 0 0.985 0 0.984 0		0.984 0 0.995 0 0.967 0 0.989 1	0.985 1 0.985 1 0.985 1	
24	1.029 1.029 1.020 1.003 1.003	1,013 1 0,991 0 1,002 1 0,995 0	1,002 1 0,996 0 0,999 0 1,003 0	1,002 0 0,996 0 0,999 0 0,989 0	0.989 0.989 0.989 0.990 0.990	0.991 0 0.982 0 0.988 0 0.982 0	0.992 0 0.995 0 0.969 0 0.976 0	0.964 0 1.019 0 1.019 0	
23	1.033 1.010 1.016 1.002	1,016 0,999 0,1006 1,005 0,986 0,986	0.997 1, 0.998 1, 1,002 0, 1,003 0,	0.998 1) 0.998 0) 0.998 0) 0.992 0)	0.988 0. 0.986 0. 0.995 0. 0.992 0.	0.984 0. 0.982 0. 0.992 0. 0.995 0.	0.992 0. 1.000 0. 0.977 0. 0.993 0.	0.982 0. 0.978 1. 0.972 1. 0.972 1.	
22	1.015 1.0 1.032 1.0 1.019 1.0 1.002 1.0 0.988 0.5	1.020 1.0 0.999 0.5 1.005 1.0 1.006 1.0 0.989 0.5	0.991 0.9 0.991 0.9 0.996 1.0 1.006 1.0	0.997 0.5 0.998 0.5 0.998 0.5 0.990 0.5	0.987 0.9 0.989 0.9 0.985 0.9 0.985 0.9	0.986 0.9 0.992 0.9 0.993 0.9 0.995 0.9	0.984 0.5 0.993 1.0 0.973 0.5 0.985 0.5	0.987 0.9 0.987 0.9 0.986 0.9 1.058 0.9	
21		1.021 1.0 0.998 0.9 1.006 1.0 1.003 1.0 0.990 0.9					0.995 0.9 0.990 0.9 0.977 0.9 0.978 0.9		
20			89 0.993 99 0.998 97 0.993 96 0.996 01 0.997	95 0.993 98 0.995 96 0.993 92 0.997 91 0.989	92 0.990 93 0.986 87 0.988 80 0.985 86 0.993	90 0.990 86 0.990 89 0.987 91 0.997		84 0.989 87 0.984 75 0.979 85 0.998	
19 2		15 1.019 35 0.988 33 1.005 36 1.008 35 0.994	35 0.989 38 0.999 32 0.997 35 0.996 36 1.001	97 0.995 95 0.998 91 0.996 95 0.991	38 0.992 39 0.987 37 0.980 90 0.986	34 0.990 34 0.989 37 0.983 38 0.991	39 0.987 33 0.996 77 0.990 39 0.990 35 0.990	37 0.984 30 0.987 39 0.975 32 0.985	
18 1		3 1.015 7 0.995 5 1.003 0 1.008 5 0.995	8 0.985 3 0.998 3 0.992 8 0.995 6 0.996	3 0.997 2 0.995 8 0.995 3 0.992	5 0.992 2 0.988 2 0.989 6 0.987 1 0.990		6 0.989 2 0.983 1 0.977 3 0.989 1 0.985	9 0.987 5 0.990 4 0.999 9 0.992 3 0.982	
		3 1.003 8 0.997 5 1.005 5 0.995	9 0.988 2 0.993 9 0.998 8 0.998	0 0.993 3 0.990 1 0.992 7 0.988 5 0.993	4 0.995 1 0.992 8 0.982 6 0.986 0 0.991	4 0.983 4 0.987 0 0.983 3 0.986	4 0.986 4 0.992 0 0.991 7 0.993 8 0.991		
3 17		1.003 1.015 1.015 0.995	0.989 0.992 0.998 0.998	0.980 0.983 0.987 0.987	1.004 0.991 0.966 0.990	0.994 0.991 0.980 0.993	0.994 0.984 0.960 0.947 0.988	0.988	
16	00000	00000	00000	00000	00000	00000	00000	00000	
Years of Service	Under 1 1 2 3 4								
_≻ Ø	D - 2 6 4	9 0 1 8 9	0 1 2 2 4	15 7 19 19 19	22 23 24 24	25 27 28 29	30 32 33 34	35 37 38 39	

DESCRIPTION: Selected Reserve Career Points Adjustment
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Adjustment to Average Career Points for Selected Reserve members to capture the effect of losses (e.g., separation, retirement, transfer) during the fiscal year.





Officer Reentering Selected Reserve Average Points

24 24 24 1 415 54 241 415 689 54 415 689 618 54 415 689 618 54 241 415 689 618 618 743 54 2415 415 689 689 618 618 743 743 743 743 7487 54 241 415 689 618 618 743 1,399 1,487 2,058 54 241 415 689 618 618 743 743 1,399 1,487 2,058 54 2411 415 689 618 618 743 743 1,399 1,487 2,058 2,173 1,690 1,690 1,690 1,690 1,690 2,173 1,884 2,643 2,643 1,603 1,603 1,603 1,603 1,603 1,603 2,510 362 3,930 1,522 3,175 3,175 2,741 1,269 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,750 2,556 1,555 2,149 2,149 2,085 3,081 1,791 1,791 1,912 1,912 1,912 1,912 1,912 1,912 1,912 1,912 1,913 3,073 2,419 2,632 3,276 2,779 2,081 2,148 3,270 2,395 2,344 2,344 3,204 2,724 3,395 3,809 3,958 2,436 2,491 2,351 3,111 3,208 3,111 2,867 3,126 3,754 4,317 4,485 3,532 3,747 4,485 3,532 3,747 4,485 3,532 3,747 4,485 3,532 3,747 4,485 3,747 4,485 3,747 4,485 3,747 4,485 3,747 4,485 3,747 4,485 3,747 4,485 3,747 4,485 3,485 4,485 2,430 2,472 2,431 2,503 2,775 2,336 2,590 3,499 3,499 3,464 2,882 3,000 3,787 3,841 4,332 1,276 5,445 1,366 1,185 1,185 3,291 3,045 2,827 3,273 2,614 2,986 3,160 3,207 3,560 3,584 3,584 3,584 3,584 3,584 3,584 3,584 3,584 3,584 3,584 3,584 3,584 3,584 3,586 3,722 4,288 5,048 4,337 4,515 3,553 3,883 4,094 4,626 4,540 4,751 4,751 4,751 4,751 3,861 3,427 4,675 4,804 4,804 3,151 3,298 3,188 3,059 3,518 3,518 3,542 3,542 3,542 2,813 3,088 3,165 3,486 3,526 3,900 4,081 4,619 4,574 4,866 4,517 5,592 5,592 5,592 5,692 6,249 6,249 6,249 6,249 6,249 6,249 6,249 6,249 6,249 6,249 6,249 6,249 6,249 3,796 4,387 3,158 2,646 5,154 4,014 4,014 6,949 7,008 4,137

DESCRIPTION: Average Career Points Transferred to the Selected Reserve via Reentering Members
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Career retirement points (for benefit purposes) accumulated by reentrants transferring to the Selected Reserve during a fiscal year.
Blank cells should be considered a value of zero (°0').

Enlisted Reentering Selected Reserve Average Points

By Entry Age	20 20 20 20 20 20 20 20 20 20 20 20 20 2	25 25 25 26 24 40 24 25 25 25 25 25 25 25 25 25 25 25 25 25	1672 1686 1683 1683 1680 1875 1575 1586 1511 1486 1573 1370 1370 1370 1370 1370 1370 1370 13	2.586 2.584 2.380 2.482 2.29 2.09 2.287 2.48 2.49 2.004 1.70 1883 1.97 1.88 2.87 2.49 1.79 1.79 1.79 1.79 1.70 1.70 1.70 1.70 1.70 1.70 1.70 1.70	2.896 2.80 2.90 2.76 2.778 3.079 2.75 2.70 2.80 2.770 2.80 2.771 2.80 2.771 2.80 2.80 2.80 2.80 2.80 2.80 2.80 2.80	86 3667 4344 3864 3868 3462 3403 1006 3573 3860 4386 4378 3277 0307 2477 377 377 387 377 377 378 377 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 377 378 378	22 4/89 4/74 5/80 4/86 4/75 5/10 4/28 4/85 2 4/20 3/8/4 4/27 3/8/2 4/8 4/15 5/10 4/28 4/8 5/2 4/27 5/27 5/27 5/27 5/27 5/27 5/27 5/27 5	90 5.281 4.680 4.233 4.041 5.077 4.594 4.041 4.253 7.084 7.21 3.480 7.843 4.622 4.782 7.882 7.883 7.88	55 5/50 6,385 5,004 6,006 6,464 5,245 6,222 5,229 5,026 5,027 5,229 5,029 5,027 5,02	22 7,146 6,001 6,473 4,890 83 7,146 6,001 6,473
PEBD	16 17 18 19 20 21 22 23	252 256 249 596 609 601 964 971 975 1,334 1,332 1,312 1 1,477 1,461 1,461	1,656 1,663 1,663 1,600 1,618 1,608 1,759 1,662 1,589 2,242 2,216 2,084 2,482 2,284 2,286	2,594 2,309 2,428 2,700 2,388 2,405 2,609 2,590 2,479 2,923 2,584 2,630 3,131 2,775 2,637	2,840 2,910 2,795 2,896 2,863 2,791 2,869 2,956 3,232 3,635 3,099 3,563 3,665 3,649 3,570	4,314 3,954 3,649 3,884 3,908 4,070 4,422 4,262 4,115 4,355 4,349 4,203 4,729 4,654	4,741 5,080 4,108 5,319 5,080 4,738 5,202 5,064 4,963 5,276 4,750 5,561 5,227 6,065 4,977	4,680 4,233 4,041 5,707 5,275 6,170 5,338 4,850 5,947 5,132 4,486 3,050 4,740 4,939 5,721	6,305 5,004 6,098 6,439 5,990 4,880 6,014 6,473 4,880 5,238 6,473 4,880 6,001 6,473 4,880	6,001 6,473 6,001 6,473

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Career retirement points (for benefit purposes) accumulated by reentrants transferring to the Selected Reserve during a fiscal year.

Blank cells should be considered a value of zero ('0').

Non-Selected Reserve with 20 Good Years Blow-up Factors

By Modeling Type and Paygrade

	Pers	son	Pay				
Age	Officer	Enlisted	Officer	Enlisted			
17	0.000	0.000	0.000	0.000			
18	0.000	0.000	0.000	0.000			
19	0.000	0.000	0.000	0.000			
20	0.000	0.000	0.000	0.000			
21	0.000	0.000	0.000	0.000			
22	0.000	0.000	0.000	0.000			
23	0.000	0.000	0.000	0.000			
24	0.000	0.000	0.000	0.000			
25	0.000	0.000	0.000	0.000			
26	0.000	0.000	0.000	0.000			
27	0.000	0.000	0.000	0.000			
28	0.000	0.000	0.000	0.000			
29	0.000	0.000	0.000	0.000			
30	0.000	0.000	0.000	0.000			
31	0.000	0.000	0.000	0.000			
32	0.000	0.000	0.000	0.000			
33	0.000	0.000	0.000	0.000			
34	0.000	0.000	0.000	0.000			
35	0.000	0.000	0.000	0.000			
36	0.000	0.000	0.000	0.000			
37	0.000	0.000	0.000	0.000			
38	0.000	0.000	0.000	0.000			
39	0.000	0.000	0.000	0.000			
40	0.000	0.000	0.000	0.000			
41	0.000	0.000	0.000	0.000			
42	0.000	0.000	0.000	0.000			
43	0.000	0.000	0.000	0.000			
44	0.000	0.000	0.000	0.000			
45	0.000	0.000	0.000	0.000			
46	0.000	0.000	0.000	0.000			
47	0.000	0.000	0.000	0.000			
48	0.000	0.000	0.000	0.000			
49	0.000	0.000	0.000	0.000			
50	0.000	0.000	0.000	0.000			
51	0.000	0.000	0.000	0.000			
52	0.000	0.000	0.000	0.000			
53	0.000	0.000	0.000	0.000			
54	0.000	0.000	0.000	0.000			
55	0.000	0.000	0.000	0.000			
56	0.000	0.000	0.000	0.000			
57	0.000	0.000	0.000	0.000			
58	0.000	0.000	0.000	0.000			
59	1.083	1.154	0.990	0.977			
60	1.105	1.190	0.986	0.977			
61	2.331	2.589	0.910	0.917			
62	4.536	4.919	0.823	1.045			
>62	4.026	4.888	0.969	0.976			

DESCRIPTION: Non-Selected Reserve with 20 Good Years ('Grey Area') Nondisabled Retirement Ratios ("Blow-up" factors or "Loads")

Arrayed by modeling type (person/pay), age, and paygrade (officer/enlisted).

These factors are applied to each year's new-retirement-from-the-Grey-Area projections to account for new retirees who were not present in the prior year's reserve data files.

Officer Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Blow-up Factors

	20									
	49									
	48									
	47									
	46									
	45									
	44				0.173					
	43				0.173 0.	0.173				
	42				0.173 0	0.173 0				
	41				0.173 0	0.173 0				
	40				0.173 0	0.173 0 0.173 0 0.173 0				
y Age	33				0.173 0	0.173 0 0.173 0 0.173 0 0.173 0				
By Entry Age	38				0.173 C	0.173 0.173 0.173 0.173 0.173	0.173			
	37				0.173 C	0.173 0.173 0.173 0.173 0.173	0.173 0			
	36				0.173	0.173 0.173 0.173 0.173 0.173	0.173 (0.173 0.173 0.173			
	35				0.173	0.173 0.173 0.173 0.173 0.173	0.173 (0.1			
	æ				0.173	0.173 0.173 0.173 0.173 0.173	0.173 0.173 0.173 0.173 0.173			
	33				0.183	0.183 0.183 0.183 0.183	0.183 0.183 0.183 0.183	0.183		
	32				0.158	0.158 0.158 0.158 0.158	0.158 0.158 0.158 0.158	0.158		
	31				0.127	0.127 0.127 0.127 0.127 0.127	0.127 0.127 0.127 0.127	0.127		
	30				0.141	0.141 0.141 0.141 0.141	0.14 0.14 0.14 0.14 0.14 0.14	0.141		
	83				0.917	0.400 0.308 0.107 0.107	0.107 0.107 0.107 0.107	0.107 0.107 0.107 0.107		
	28				0.857	0.278 0.333 0.092 0.092 0.092	0.092 0.092 0.092 0.092	0.092 0.092 0.092 0.092	0.092	
	27				0.700	0.241 0.241 0.298 0.333 0.188	0.115 0.115 0.115 0.115	0.115 0.115 0.115 0.115	0.115	
	28				0.667	0.309 0.303 0.177 0.141 0.224	0.136 0.136 0.136 0.136	0.136 0.136 0.136 0.136	0.136 0.136 0.136	
	52				0.700	0.513 0.342 0.136 0.258 0.182	0.127 0.127 0.127 0.127	0.127 0.127 0.127 0.127 0.127	0.127 0.127 0.127 0.127	
	24				0.830	0.411 0.310 0.248 0.132 0.115	0.212 0.100 0.096 0.122 0.049	0 2 3 4 0 2 3 4 0 2 3 4 0 2 3 4 0 2 3 4	0 2 3 4 4 4 0 0 2 3 4 4 0 0 2 3 4 4 0 0 0 2 3 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	23				0.928	0.597 0.392 0.202 0.197 0.172	0.112 0.138 0.071 0.114 0.059	0.152 0.181 0.146 0.275 0.409	0.133 0.788 0.788 0.788	0.788
	22				0.925	0.620 0.348 0.211 0.218 0.200	0.114 0.049 0.046	0.161 0.135 0.221 0.210 0.186	0.258 0.329 0.364 0.364 0.364	0.364
	21				0.367	0.325 0.226 0.108 0.212 0.104	0.192 0.209 0.204 0.204	0.204	0.204	0.204
	20				0.298	0.135 0.155 0.174 0.132	0.252 0.252 0.252 0.252 0.252	0.252 0.252 0.252 0.252 0.252	0.252 0.252 0.252 0.252 0.252	0.252
	19				0.411	0.148 0.112 0.217 0.189 0.153	0.159 0.125 0.360 0.207	0.108 0.157 0.200 0.368 0.278	0.34	0.340
	18				0.390	0.126 0.129 0.143 0.179	0.217 0.217 0.217 0.217 0.217	0.217 0.217 0.217 0.217 0.217	0.217 0.217 0.217 0.217 0.217	0.217
	17				0.247	0247 0247 0247 0247 0247	0247 0247 0247 0247 0247	0247 0247 0247 0247 0247	0247 0247 0247 0247 0247	0.247
	16	000000	000000	000000	000000	000000	000000	000000	000000	0000
PEBD	Service	Under 1 2 3 4	u o ≻ ∞ o	0 = 5 5 4	5 5 7 8 6	20 23 23 24	25 27 28 29	33 33 34 34	35 37 39 39	4 4 1 1

Selected Reserve to Non-Selected Reserve with 20 Good Years ('Grey Area') Transfer Rate Ratios ("Blow-up" factors or "Loads") -- Count-Based Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Increment rates to account for "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area.

Blank cells should be considered a value of zero ('0.000').

Enlisted Selected Reserve to Non-Selected Reserve with 20 Good Years Transfer Blow-up Factors

20										I
49										I
48										I
47										I
46										I
45										I
44				0.104						I
43				0.104	0.104					I
42				0.104	0.104					I
41				0.104	0.104 401.0					I
40				0.104	20.0 20.0 20.0 20.0 20.0 20.0 20.0 20.0					I
33				0.104	0.0000 4444444					I
38				0.133	0.100 0.100 0.100 0.100	0.100				I
37				0.182	0.182 0.182 0.182 0.182	0.182				I
36				0.083	0.083 0.083 0.083 0.083	0.083				I
35				0.081	0.081 0.081 0.081 0.081	0.081 0.081 0.081				I
용				0.067	0.067 0.067 0.067 0.067 0.067	0.067 0.067 0.067 0.067 0.067				I
33				0.083	0.083 0.083 0.083 0.083	0.083 0.083 0.083 0.083	0.083			I
32				0.102	0.102 0.102 0.102 0.102	0.102 0.102 0.102 0.102 0.102	0.102			I
31				0.094	0.094	0.094	0.094			I
30				960:0	960.0 960.0 960.0 960.0	960:0 960:0 960:0 960:0	960:0 960:0 960:0			I
83				0.075	0.075 0.075 0.075 0.075	0.075 0.075 0.075 0.075 0.075	0.075 0.075 0.075 0.075 0.075			I
28				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		I
27				0.090	0.090 0.090 0.090 0.090 0.090	0.090 0.000 0	0.090 0.090 0.090 0.090 0.090	0.090		I
92				0.100	0.100	0.10 0.10 0.10 0.10 0.10	0.100 0.100 0.100 0.100	0.100		I
52				0.092	0.092 0.092 0.092 0.092	0.092 0.092 0.092 0.092 0.092	0.092 0.092 0.092 0.092 0.128	0.128 0.128 0.128 0.128		I
54				0.095	0.052 0.049 0.038 0.034	0.047 0.088 0.093 0.151 0.126	0.098 0.239 0.059 0.181	0.256 0.256 0.256 0.256 0.256		I
23				990'0	0.039 0.058 0.075 0.075	0.085 0.106 0.148 0.125 0.130	0.121 0.134 0.089 0.195 0.253	0.138 0.270 0.270 0.270	0.270	I
22				0.070	0.043 0.051 0.059 0.059	0.103 0.104 0.180 0.180	0.173 0.160 0.088 0.206 0.149	0.218 0.161 0.310 0.310	0.310	I
21				0.042	0.023 0.040 0.052 0.044 0.065	0.083 0.070 0.203 0.092	0.295 0.212 0.157 0.156 0.124	0.137 0.255 0.258 0.258 0.258	0.258	I
20				0.048	0.069 0.033 0.048 0.052 0.081	0.072 0.101 0.134 0.153 0.109	0.187 0.200 0.140 0.225 0.119	0.085 0.223 0.149 0.315 0.315	0.315	I
19				0.066	0.053 0.046 0.060 0.035 0.069	0.060 0.128 0.144 0.193 0.168	0.140 0.303 0.123 0.156 0.253	0.115 0.113 0.113 0.113	0.113	I
18				0.088	0.029 0.059 0.077 0.062 0.070	0.092 0.092 0.163 0.141 0.192	0.158 0.211 0.211 0.130 0.194	0.122 0.118 0.233 0.182 0.182	0.182	l
17				0.105	0.105	0.105	0.105	0.105	0.105	l
16	00000	00000	000000	00000	000000	000000	000000	000000	0000	
Service	_								-	l
8.8	Under 1 2 3 3 4 4	90,00	0 1 2 5 4	16 17 19	20 22 23 24	25 26 27 28 29	33 33 34 34	35 37 38 39	0 4 4	L

Selected Reserve to Non-Selected Reserve with 20 Good Years ('Grey Area') Transfer Rate Ratios ("Blow-up" factors or "Loads") -- Count-Based Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Increment rates to account for "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area.

Blank cells should be considered a value of zero ('0.000').

- 155 -

Officer Non-Selected Reserve with 20 Good Years Career Points Adjustment Due To Transfer Blow-ups

	20										
	49										
	48										
	47										
	46										
	45										Φ
	44				1.033						ᆵ
	43				1.033	1.033					., not
	42				1.033	0.982					.i.e
	41				1.033	1.023					actol
	40				1.033	0.982 1.023 0.896 0.896					/-up 1
By Entry Age	38				1.033	0.982 0.896 1.000 1.000					Blow "una
ByEn	38				1.033	0.982 1.023 0.896 1.000 0.954	0.954				nsfer ts of
	37				1.033	0.982 1.023 0.896 1.000 0.954	0.954				o Trai
	36				1.033	0.982 1.023 0.896 1.000 0.954	0.954				lue to areer tors.
	32				1.033	0.982 1.023 0.896 1.000 0.954	0.954 0.954 0.954 0.954				ent d ye Ca o fact
	怒				0.992	1.023 1.030 0.992 1.013	00011000				ustm ed). veraç veru
	33				0.985	0.825 0.980 1.000 0.995 1.000	1.014 1.014 1.014 1.014	1.014			s Adj enlist on A er bk
	32				0.959	0.908 0.956 0.968 0.999 0.943	1,000 0.998 0.998 0.998	0.998			Points icer/e ifect ifect ransf
	31				7.200	0.927 1.017 1.003 1.000 0.968	1.007 0.922 0.990 1.000 1.000	1.000			eer Feer Feer Feer Feer Feer Feer Feer
	30				1.036	1.016 0.993 0.995 1.006	0.981 0.947 0.989 1.000 0.965	0.965 0.965 0.965 0.965			Car grad tirees a due
	83				0.996	0.922 1.036 1.000 1.003	0.975 0.958 0.979 1.000 0.990	0.990 0.990 0.990 0.990			Area' I pay ea re / Are ('0.00
	28				0.956	0.908 1.040 0.998 0.994 0.976	1.011 1.007 0.974 0.992 1.000	0.958 1.000 1.000 1.000	1.000		srey, and y Arick
	27				0.938	0.958 0.981 0.961 0.995	1.022 0.988 0.991 0.989 0.953	1.022 0.966 1.059 1.059	1.059		rs ('G YOS r Gre ers to
	92				0.957	0.980 0.980 0.974 0.989 0.990	1.007 0.966 1.014 0.981 1.022	1.009 1.004 0.986 0.986	0.986 0.986 0.986		Yea EBD Its fo ansfe valu
	22				0.958	1.001 0.979 1.003 0.995	0.996 1.009 0.977 0.966 0.999	1.000 0.998 1.038 0.965	0.965 0.965 0.965 0.965		Gooc ed P Poir ar) tra
	24				976	0.978 0.973 1.002 1.007	0.985 0.988 1.002 0.991	0.996 0.991 1.005 0.995	1.035 1.035 1.035 1.035		n 20 (nplet areer areer or year
	23				0.957	1.001 0.998 1.002 0.994	1.003 0.998 0.987 0.988 1.000	1.002 1.018 0.982 1.008	1.005 1.057 1.057 1.057	1.057	Non-Selected Reserve with 20 Good Years ('Grey Area') Career Points Adjustment due to Transfer Blow-up facton Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted). Adjustment to Average Career Points for Grey Area retirees — effect on Average Career Points of "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area due to transfer blow-up factors. Blank cells should be considered a value of zero ('0.000').
	22				0.943	1.001 0.994 0.992 1.024	1.009 0.999 0.994 0.996	1.009 1.010 1.010 1.010	010.1 010.1 010.1 010.1	1.010	serve y age wera ve th
	21				0.869	0.933 0.936 0.983 0.989	0.972 0.971 1.009 0.976 0.989	1.016 1.013 1.027 1.016 1.004	0.985 1.024 1.024 1.024	1.024	d Reentr entr t to A eser eser shou
	20				0.901	0.923 1.000 1.003 1.003	0.993 0.998 1.000 1.008	1.005 1.015 0.997 1.026 0.997	1.013 0.999 0.999 0.999	0.999	lecte ad by ment ed R
	19				0.920	0.924 0.985 0.972 0.964 0.994	0.978 1.027 1.009 0.966 1.005	1.001 1.036 1.046 0.945	1.004 1.008 0.999 1.001	1.00.1	n-Se rraye djust elect elect
	18				0.907	0.968 0.958 0.979 0.962 0.980	0.984 1.001 0.995 0.992 1.002	1.000 0.970 1.061 1.036	1.043 0.968 1.018 1.003 0.817	1.000	z
	17				706.0	0.968 0.958 0.979 0.962 0.980	0.984 1.001 0.995 0.992 1.002	1.000 0.970 1.061 1.036	1.043 0.968 1.018 1.003 0.817	1,000	NOI
	16	000000	000000	000000	000000	000000	000000	000000	000000	0.000	RIP
PEBD Years of	Service	Under 1		0-6:-	10.001 :	0 - 4:	10 (0) :	0-6:-	10 10 5		DESCRIPTION:
		2 - 0 € 4	08405	0 1 2 2 2 4	16 77 19 19	22 23 24 24	25 27 28 28 29	30 33 34 34	35 37 38 39	0 4 4	니

Enlisted Non-Selected Reserve with 20 Good Years Career Points Adjustment Due To Transfer Blow-ups

46 47									
45									
44				0.937					
43				0.937	0.937				
42				0.937	0.937				
4				0.937	0.937 0.937 0.937				
40				1.046	1.046 1.046 1.046				
39				0.951	0.825 1.421 1.421 1.421				
88				1.254	0.910 1.007 0.953 0.953	0.953			
37				0.918	1.047 0.918 0.941 1.413	1.413			
36				1.196	1.069 1.014 0.978 0.923 1.123	1.123 1.123			
35				0.991	1.129 1.038 1.021 0.975	1.652 1.652 1.652 1.652			
怒				7.76.0	0.975 0.886 1.007 1.083 0.985	1.022 1.022 1.022 1.022			
33				0.987	0.960 1.001 1.046 0.938 1.024	0.981 1.001 1.455 1.455	1.455		
35				1.006	0.993 0.979 0.997 1.020 0.935	0.948 1.028 0.962 0.962 0.962	0.962		
31				0.982	1.006 0.932 0.991 1.007	1.050 0.979 1.010 0.994 0.994	0.994		
8				0.985	0.971 0.997 0.986 1.000	1.026 0.939 0.996 1.001	1.158 1.158 1.158 1.158		
8				1.006	0.977 0.993 1.004 0.997 1.000	0.985 1.010 0.951 1.002 0.998	0.981 1.073 1.073 1.073		
28				0.988	1.010 1.000 1.001 0.991	0.994 0.994 0.985 1.035	0.999 1.000 0.824 0.824 0.824	0.824	
27				0.999	0.989 0.989 0.994 1.001 0.998	0.998 1.006 1.011 1.006	0.982 0.981 1.040 1.040	1.040	
8				0.983	0.972 0.999 0.981 0.998 1.003	0.994 0.984 0.990 0.987 0.994	0.987 1.024 0.996 0.980 1.170	1.170	
52				0.970	0.999 0.992 0.994 1.009 0.996	0.987 0.997 1.004 1.012	1.005 1.004 1.014 0.966	8 4 1 1 1 1 4 8 4 1 1 1 1 1 1 1 1 1 1 1	
24				1.007	0.984 0.999 0.995 0.999 0.996	0.994 0.975 1.005 0.995 0.991	0.997 0.991 0.998 1.015	1,019 1,070 1,070 1,070	
23				0.994	0.991 0.993 0.989 1.007	0.998 0.999 1.006	1.011 1.007 0.992 1.015	1039 1035 1035 1035	1.035
22				0.987	0.996 0.993 0.994 0.995	1.005 0.992 1.017 1.002 0.995	1.009 0.982 1.004 1.012	1.012 1.053 0.992 0.992 0.992	0.992
21				0.997	1.002 0.996 1.000 0.995 0.997	0.997 0.999 0.990 0.996	1.003 0.993 1.002 1.010	1.021 1.024 0.981 0.992	0.992
20				0.999	0.996 1.001 1.001 0.997	0.996 0.997 1.001 0.997	1.019 1.015 0.998 1.029 1.015	1.019 1.027 1.048 0.983	1.309
19				0.988	0.991 0.995 0.997 1.000 1.004	0.998 0.989 1.001 1.002	0.993 1.009 1.020 1.041	0.995 1.006 1.010 1.131	1.009
8				0.998	0.996 0.992 0.993 1.000	0.999 1.005 0.994 0.992	1.005 0.987 1.012 0.991	1.000 1.024 1.000 0.996	1.112
17				966.0	0.996 0.992 0.993 1.000 1.000	0.999 1.005 1.007 0.994 0.992	1.005 0.987 1.012 0.991	1.017 1.024 1.000 0.996	1.112
16	000000	000000	000000	000000	000000	000000	000000	000000	0.000
Service	Under 1 2 3 4	u o ⊳ ∞ o	0 1 2 2 5 4	5 5 7 5 8 E	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	25 27 28 29	33 3 3 3 3 3 4 3 3 4 4 4 4 4 4 4 4 4 4	38 37 39 39	4 4 1

PTION: Non-Selected Reserve with 20 Good Years ('Grey Area') Career Points Adjustment due to Transfer Blow-up factor.
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Adjustment to Average Career Points for Grey Area relitiese – effect on Average Career Points of "unanticipated" (i.e., not in the Selected Reserve the prior year) transfers to Grey Area due to transfer blow-up factors.

Blank cells should be considered a value of zero ('0.000).

Officer Selected Reserve Promotion and Merit Increase Scales (PAMS)

	>62	1.000								
	62	000:1								
	61	1.095 1.095 1.095								
	09	1.048 1.								
	29	1.067 1.0 1.067 1.0 1.067 1.0 1.067 1.0								
	28	1038 110 1038 110 1038 110 11038 110	1.038							
	22	1.096 1.096 1.096 1.096 1.096 1.096	0.096 1.096							
	99									
	29	72 1.024 72 1.024 72 1.024 72 1.024	72 1.024 72 1.024 72 1.024							
	54	24 1.072 26 1.072 27 1.072 1.072 1.072	77 1.072 77 1.072 77 1.072 77 1.072							
	53	18 1.031 72 1.196 72 1.062 72 1.061 1040	88 1.057 54 1.037 58 1.037 57 1.037	0						
	52	06 1.018 28 1.172 37 1.101 78 1.072 00 1.000	25 1.054 25 1.054 25 1.058 25 1.000 25 0.967	25 1.000						
	51	7 1,006 10 1,028 14 1,078 16 1,000	1084 1025 1025 13 1025 13 1025	13 1.025 13 1.025						
	90	3 1.007 3 1.199 6 1.110 0 1.054 2 1.026	2 1.095 2 1.003 1 1.033 6 1.033 6 1.033	6 1.033 6 1.033 6 1.033						
	49 5	4 1.013 3 1.203 4 1.106 1 1.050 6 1.022	5 1.082 5 1.032 6 1.041 4 1.016	1016						
		3 1.173 3 1.173 5 1.094 5 1.051 5 1.016	2 1.065 1 1.046 1 1.046 3 1.014	4401 4401	m					
	48	1.163 1.136 1.136 1.070	1.062 1.016 1.071 1.008 1.008	1.038 1.038 1.038	1.038					
	47	1.033 1.135 1.086 1.019	1.069 1.016 1.008 1.008	1.051	1.035					
	46	1.053 1.208 1.153 1.078	1.066 1.052 1.012 1.012	1.030 1.046 1.040 1.040	1.040 1.040 1.040					
	45	1.041 1.205 1.129 1.078	1.058 1.047 1.034 1.034	1.016 1.068 1.046 1.046	1.053 1.053 1.053					
	44	1.037 1.182 1.125 1.075 1.015	1.075 1.015 1.061 1.037 1.072	1.022 1.030 1.037 1.046 1.003	1.044 1.044 1.044 1.044					
	43	1.045 1.193 1.148 1.077 1.026	1.067 1.006 1.050 1.023	1.023 1.047 1.047 1.047	1.049 1.014 1.023 1.023	1.023				
	42	1.060 1.199 1.142 1.086 1.015	1.066 1.012 1.062 1.016 1.076	1.019 1.008 1.041 1.012	1.050 1.010 1.030 1.017	1.035				
	4	1.063 1.194 1.083 1.017	1.058 1.010 1.065 1.007	1.028 1.054 1.010 1.042	1.044 1.039 1.005 1.044	1.033				
e Je	40	1.065 1.176 1.153 1.088 1.014	1.070 1.012 1.051 1.052	1.013 1.064 1.012 1.045	1.048 1.033 1.010 1.042	1.017 1.053 1.053				
Entry Age	39	1.049 1.216 1.152 1.089 1.010	1.065 1.024 1.018 1.018	1.024 1.014 1.039 1.039	1.049 1.035 1.010 1.040	1.024 1.043 1.059 1.059				
ByE	38	1.055 1.187 1.088 1.018	1.071 1.008 1.057 1.046	1.032 1.055 1.009 1.052 1.012	1.056 1.018 1.035 1.012 1.037	1.021 1.043 1.035	1.035			
	37	1.043 1.193 1.073 1.073	1.071 1.014 1.009 1.009	1.019 1.071 1.019 1.052 1.010	1.045 1.038 1.045	1.048 1.022 1.058 1.040	1.040			
	36	1.032 1.194 1.168 1.088	1.021 1.021 1.060 1.023	1.014 1.065 1.040 1.040	1.005 1.005 1.046 1.015	1.024 1.043 1.040 1.040	1.011 4.011 4.011			
	35	1.039 1.162 1.162 1.026	1.068 1.016 1.062 1.013	1.027 1.058 1.016 1.053 1.020	1.048 1.012 1.037 1.036	1.020 1.036 1.013 1.018	1.068 1.003 1.003			
	8	1.041 1.190 1.182 1.100 1.028	1.069 1.018 1.053 1.015	1.021 1.058 1.043 1.043	1.051 1.014 1.039 1.039	1.016 1.033 1.034 1.034	1.034 1.022 1.064 1.064			
	33	1.042 1.194 1.181 1.104 1.027	1.062 1.023 1.024 1.021	1.017 1.071 1.015 1.051 71.017	1.045 1.011 1.040 1.016	1.019 1.029 1.014 1.041	1.024 0.996 1.014 1.046	1.046		
	32	1.030 1.185 1.178 1.093	1.068 1.022 1.020 1.020 1.070	1.019 1.063 1.027 1.051	1.020 1.034 1.034 1.039	1.024 1.047 1.007 1.020 1.010	1.031 0.999 1.023 1.016	1.017		
	31	1.030 1.183 1.171 1.106 1.030	1.067 1.030 1.053 1.017	1.026 1.061 1.021 1.055	1.039 1.013 1.037 1.038	1.023 1.042 1.021 1.021	1.030 1.017 1.018 1.013	1.026 1.026 1.026		
	30	1.032 1.191 1.185 1.105 1.032	1.076 1.019 1.053 1.063	1.035 1.065 1.053 1.053	1.046 1.014 1.039 1.035	1.020 1.035 1.019 1.025	1.037 1.006 1.007 1.007	0.969 1.005 1.005		
	29	1.018 1.200 1.101 1.043	1.069 1.027 1.026 1.028	1.038 1.072 1.021 1.044 1.020	1.050 1.023 1.037 1.016 1.031	1.025 1.035 1.029 1.029	1.023 1.020 1.010 1.010	0.996 1.044 1.066 1.066		
	28	1.022 1.178 1.204 1.108	1.024 1.024 1.061 1.029 1.072	1.040 1.068 1.025 1.049	1.045 1.016 1.037 1.036	1.041 1.020 1.026 1.026	1.033 1.014 1.015 1.007	0.997 1.007 1.024 1.082 1.082	1.082	
	27	1.040 1.160 1.235 1.114 1.056	1.076 1.034 1.057 1.025	1.039 1.029 1.053 1.053	1.041 1.020 1.038 1.018 1.033	1.023 1.041 1.014 1.021 1.010	1.031 1.018 1.015 1.012	1.003 1.009 0.986 0.989 1.063	1.063	
	92	1.022 1.165 1.251 1.101 1.062	1.070 1.035 1.062 1.030 1.073	1.032 1.072 1.033 1.055 1.020	1.046 1.023 1.037 1.017 1.036	1.014 1.042 1.015 1.025 1.010	1.032 1.018 1.011 1.008	1.012 1.002 0.997 0.964	0.988 0.988 0.988	
	52	1.022 1.168 1.266 1.113 1.061	1.071 1.032 1.061 1.073	1.040 1.076 1.030 1.056	1.041 1.020 1.030 1.019	1.022 1.046 1.015 1.025	1.030 1.010 1.018 0.996	0.992 1.003 1.018 1.016	1.010 1.028 1.028	
	24	1.016 1.175 1.264 1.136 1.075	1.027 1.027 1.064 1.026 1.079	1.038 1.024 1.052 1.052	1.041 1.034 1.038 1.019	1.023 1.042 1.019 1.023	1.029 1.013 1.015 0.998	0.997 1.014 1.018 0.995	1.021 1.016 1.016 1.086	
	23	1.012 1.199 1.247 1.142 1.071	1.072 1.018 1.060 1.023 1.084	1.037 1.068 1.021 1.046	1.043 1.034 1.035 1.035	1.023 1.045 1.018 1.024	1.032 1.011 1.028 1.016 0.996	1.007 1.016 1.012 1.010	1.004 1.009 1.058 1.058	1.058
	22	1.007 1.141 1.262 1.141 1.081	1.080 1.032 1.064 1.028	1.040 1.021 1.021 1.022	1.043 1.034 1.035 1.035	1.023 1.026 1.026 1.014	1.031 1.014 1.013 0.993	1.005 1.014 1.019 1.001	0.992 0.991 1.041 1.048	1.137
	21	1.011 1.096 1.242 1.093 1.077	1.054 1.061 1.056 1.056	1.051 1.054 1.070 1.044	1.050 1.035 1.028 1.028	1.024 1.026 1.027 1.027	1.024 1.024 1.015 1.015	1.003 1.005 1.007	0.999 1.000 1.013 0.990 1.007	1.053
	20	1.104 1.211 1.057 1.057	1.087 1.065 1.055 1.055	1.083 1.087 1.067 1.067	1.051 1.038 1.034 1.033	1.025 1.038 1.025 1.025	1.023 1.023 1.017 1.017	1.012 1.014 1.007 1.011	1.012 1.013 0.997 0.995	0.999
	19	1.053 1.053 1.033 1.060	1.086 1.070 1.073 1.069 1.080	1.065 1.080 1.061 1.074 1.050	1.051 1.046 1.052 1.035	1.031 1.029 1.032 1.032	1.027 1.027 1.021 1.021	1.020 1.016 1.010 1.002	1.009 1.004 1.005 1.005	1.032
	18	1.161 1.161 1.045 1.037	1.077 1.073 1.076 1.066 1.079	1.070 1.087 1.063 1.077 1.051	1.045 1.045 1.039 1.038	1.033 1.030 1.031 1.031	1.025 1.025 1.026 1.026	1.020 1.014 1.021 1.003	1.012 1.009 1.010 1.012 0.985	0.992
	17	1001 1401 1401 1401 1401	1.072 1.073 1.099 1.051 1.086	1.075 1.102 1.070 1.067 1.067	1.044 1.026 1.035 1.035	1.035 1.027 1.024 1.033	1.021 1.019 1.019 1.019	1.024 0.994 1.042 0.992 1.025	1.025 1.025 1.025 1.025	1.025
	16	0.000	0.0000	0.0000	0.000	0.0000000000000000000000000000000000000	0.0000000000000000000000000000000000000	0.0000000000000000000000000000000000000	0.0000000000000000000000000000000000000	0.000
PEBD	Years of Service	Under 1 1 2 3 4	v ∞ ≻ ∞ o	0 + 5 5 4	5 0 t 8 0 0 0 t 8 0	55 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	50 50 50 50 50 50 50 50 50 50 50 50 50 5	33 3 3 3 3 3 3 3 4 5 5 5 5 5 5 5 5 5 5 5	36 33 33 34 35	4 4 40

ESCRIPTION: Selected Reserve Promotion and Merit Increase scales (PAMS)

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Additional basic pay increases (beyond across-the-board) earned by a Selected Reserve during a fiscal year. Paygrade transfers are excluded in the development: Reentrants are included.

Blank cells should be considered a value of zero (0.000).

Enlisted Selected Reserve Promotion and Merit Increase Scales (PAMS)

>62	1.231								
62	1.231								
61	21 22 12 12 13 14								
09	22122								
26	22222 22222								
28	234 12 234 12 23 12 23 12 23 12 24 12	231							
22		-							
26	1233	1231							
	1 1 23 1 1 23 1 1 23 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 2 3 1 1 1 2 3 1 1 1 2 3 1 1 1 1	1 1231							
4 55	22222	2222							
3 54	22222	22222	-						
53	22222	22222	.82						
52	1.275 1.352 1.071 0.999	0.999	0.999						
51	1.063 1.082 1.082 1.328	1218	1.218						
20	1.199 1.181 1.113 1.246	1018 1018 1018 1018	1.018 1.018 1.018 1.018						
49	1233 1.154 1.088 1.024	1.086 1.056 1.056 1.056	1.056 1.056 1.056 1.056						
48	1201 1.077 1.04 1.061	1.041 1.000 1.089 1.089	1.089 1.089 1.089 1.089	1.089					
47	1.211 1.164 1.118 1.095 1.050	1.025 1.049 1.067 1.024	1.024 1.024 1.024 1.024	1.024					
46	1.154 1.133 1.140 1.044	1.112 1.026 1.047 1.000 0.997	0.994 0.994 0.994 0.994	0.994 0.994 0.994					
45	1.152 1.221 1.083 1.153	1.068 1.068 1.034 1.053	0.997 1.006 1.006 1.006	1.006 1.006 1.006					
44	1.133 1.088 1.080 1.090	1.089 1.024 1.068 1.034	1.061 1.015 0.992 0.992 0.992	0.992 0.992 0.992 0.992					
43	1.140 1.137 1.116 1.057 1.022	1.076 1.063 1.063 1.060	1.025 1.076 1.018 0.998 1.035	1.006	1.000				
42	1.097 1.128 1.100 1.038	1.038 1.070 1.020 1.040	1.027 1.048 1.061 0.997 1.031	1.067 1.002 0.997 0.997 0.997	0.997				
41	1.097 1.127 1.066 1.082 1.045	1.066 1.019 1.076 1.028 1.050	1.023 1.063 1.026 1.013 1.020	1.012 1.018 1.023 1.023	1.033				
40	1.075 1.110 1.085 1.063	1.038 1.033 1.075 1.023 1.063	1.024 1.023 1.030 1.030	1.030 1.018 1.035 1.009 1.008	1.028 1.028 1.028				
38	1.077 1.117 1.082 1.089	1.034 1.023 1.023 1.052	1.026 1.051 1.025 1.025 1.031	1,031 1,022 1,031 1,020 1,023	1.024 1.024 1.024 1.024				
38	1.074 1.106 1.083 1.072 1.028	1,022 1,022 1,034 1,064	1.043 1.024 1.028 1.038	1.027 1.024 1.008 1.008	1.027 1.016 0.917 0.917 0.917	0.917			
37	1.069 1.106 1.077 1.070	1.051 1.024 1.028 1.058	1.020 1.048 1.018 1.031	1.020 1.020 1.031 1.029	1.027 1.037 1.011 0.980 0.980	0.980			
36	1.079 1.110 1.082 1.071 1.019	1.057 1.020 1.058 1.029 1.062	1.020 1.044 1.023 1.031	1.024 1.024 1.021 1.021	1.021 1.030 1.030 1.042	1.042			
35	1.073 1.083 1.068 1.024	1.062 1.019 1.051 1.056	1.028 1.024 1.024 1.033	1.027 1.020 1.035 1.019 1.022	1.020 1.050 1.023 1.046	1.028 1.028 1.028			
×	1.074 1.108 1.078 1.071 1.024	1.066 1.015 1.028 1.028 1.063	1.028 1.042 1.023 1.034	1.024 1.024 1.028 1.022	1.021 1.049 1.030 1.048	1.067 0.906 0.906 0.906 0.906			
33	1.074 1.084 1.088 1.023	1,074 1,034 1,031 1,063	1.027 1.027 1.021 1.024	1.041 1.015 1.039 1.016	1.026 1.040 1.023 1.025	1.067 0.881 0.881 0.881	0.881		
32	1.072 1.079 1.070 1.023	1.075 1.012 1.027 1.031	1.027 1.023 1.028 1.024	1.033 1.021 1.019 1.019	1.022 1.041 1.045 1.022	1.056 1.022 1.026 1.045	1.045		
31	1.074 1.109 1.082 1.071	1,079 1,008 1,022 1,064	1.032 1.048 1.023 1.038	1.035 1.018 1.021 1.020	1.045 1.024 1.039 1.029	1.069 1.025 1.018 1.016	1.024 1.024 1.024		
30	1.071 1.080 1.072 1.023	1.075 1.022 1.029 1.062	1.028 1.052 1.036 1.036	1.025 1.025 1.035 1.018 1.026	1.045 1.045 1.046 1.046	1.057 1.023 1.018 1.017 1.013	0.923 0.923 0.923 0.923		
83	1.074 1.109 1.078 1.071 1.023	1.076 1.025 1.034 1.060	1.050 1.056 1.026 1.035	1.025 1.040 1.040 1.028	1.021 1.023 1.039 1.031	1.064 1.019 1.027 1.028	1,000 1,030 1,030 1,030		
28	1.074 1.110 1.081 1.071 1.024	1.076 1.012 1.026 1.066	1.050 1.050 1.025 1.032 1.024	1.021 1.021 1.023 1.023	1.024 1.043 1.027 1.034 1.031	1.064 1.020 1.018 1.019 1.035	1.012 0.996 1.043 1.043	1.043	
27	1.075 1.110 1.082 1.073 1.024	1.078 1.034 1.034 1.066	1.028 1.049 1.029 1.036	1.023 1.023 1.024 1.024	1.024 1.045 1.025 1.037 1.026	1.061 1.020 1.024 1.013	1.021 1.008 0.995 1.050 1.050	1.050	
28	1.075 1.110 1.081 1.071 1.025	1.077 1.012 1.037 1.031 1.061	1.034 1.052 1.029 1.038 1.028	1.033 1.024 1.024 1.025	1.023 1.042 1.040 1.025	1.061 1.027 1.022 1.016 1.027	1.024 1.017 1.013 1.013 0.936	0.936 0.936 0.936	
25	1.074 1.108 1.073 1.023	1.078 1.014 1.045 1.031 1.063	1.030 1.052 1.023 1.041	1.040 1.022 1.040 1.022 1.027	1.021 1.045 1.023 1.037 1.028	1.020 1.020 1.018 1.018	1.013 1.015 1.009 1.017	0.938 0.938 0.938	
24	1.077 1.109 1.072 1.024	1.077 1.016 1.050 1.030 1.063	1.029 1.027 1.027 1.040	1.035 1.023 1.026 1.025	1.021 1.044 1.023 1.024	1.065 1.019 1.024 1.017 1.027	1.012 1.015 1.008 1.008 1.006	0.993 1.024 1.024 1.024	
23	1.077 1.108 1.072 1.025	1.076 1.016 1.059 1.029 1.063	1.029 1.052 1.027 1.040	1.036 1.022 1.023 1.023	1.023 1.025 1.025 1.039	1.065 1.018 1.021 1.017	1.013 1.013 1.005 1.005	1.005 1.007 0.973 0.973 0.973	0.973
22	1.082 1.080 1.089 1.024	1.079 1.016 1.063 1.063	1.028 1.052 1.040 1.040	1.036 1.025 1.020 1.020	1.022 1.047 1.027 1.021	1.068 1.022 1.021 1.027	1.018 1.013 1.026 1.026 1.012	1.001 1.009 1.040 1.040	040. 040.
21	1.084 1.110 1.079 1.073	1.079 1.018 1.067 1.031 1.080	1.026 1.057 1.027 1.038 1.024	1.034 1.022 1.023 1.023	1.025 1.048 1.028 1.026	1.067 1.024 1.019 1.034	1.014 1.015 1.027 1.009	1.008 1.010 1.009 1.007	1.087
20	1.090 1.111 1.080 1.070 1.024	1.079 1.073 1.029 1.061	1.025 1.052 1.027 1.040	1.035 1.023 1.021 1.027	1.022 1.026 1.039 1.026	1.067 1.023 1.023 1.017 1.031	1.010 1.018 1.024 1.015	1.008 1.011 1.025 0.999 1.009	1.009
19	1.095 1.118 1.080 1.068	1.079 1.076 1.030 1.063	1.023 1.054 1.024 1.025	1.036 1.023 1.021 1.021	1.024 1.049 1.039 1.027	1.066 1.022 1.019 1.029	1.015 1.016 1.027 1.014	1.009 1.008 1.008 1.008	1.008
18	1.090 1.133 1.085 1.066 1.021	1.020 1.020 1.075 1.080 1.062	1.023 1.055 1.027 1.040 1.027	1.039 1.023 1.021 1.021	1.024 1.050 1.031 1.041 1.025	1.020 1.020 1.020 1.013 1.031	1.014 1.013 1.008 1.027 1.007	1.006 1.019 1.019 1.006	1.006
17	1.066 1.148 1.110 1.065	1.022 1.069 1.069 1.062	1.026 1.050 1.037 1.037	1.034 1.022 1.025 1.025	1.018 1.048 1.034 1.028	1.065 1.019 1.021 1.023	1.028 1.015 0.998 1.000	00001	1.000
16	000000	000000	000000	000000	000000	000000	000000	000000	00000
Years of Service	der 1								
×ŏ	Under . 2 3 4	9 8 4 9 2	5 1 2 5 4	5 5 7 8 6 19 6	22 23 24 24	25 26 27 28 29	30 32 33 34 34	35 37 38 39	4 4

Selected Reserve Promotion and Merit Increase scales (PAMS)

Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).

Additional basic pay increases (beyond across-the-board) earned by a Selected Reserve during a fiscal year. Paygrade transfers are excluded in the development: Reentrants are included.

Blank cells should be considered a value of zero (0.000).

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Officer Non-Selected Reserve with 20 Good Years Promotion and Merit Increase Scales (PAMS)

	20									
	49									
	48									
	47									
	46									
	45									
	44				0.992					
	43				0.992	0.992				
	45				0.992	0.992				
	41				0.992	0.992				
m	40				0.992	0.992 0.992 0.992 0.992				
By Entry Age	33				0.992	0.992 0.992 0.992 0.992				
ByEn	38				0.992	0.992 0.992 0.992 0.992	0.992			
	37				1.000	1.000 1.029 1.029 1.029	1.029			
	36				1.000	1.000 1.015 1.009 1.009	1.009 1.009			
	35				1.007	1.007 1.020 1.000 0.999 1.005	1.005 1.005 1.005			
	×				1.008	1.008 1.027 1.005 0.998	0.999 0.999 0.999 0.999			
	33				1.007	1.007 1.019 1.003 0.995	1.009 0.998 0.998 0.998	0.998		
	32				1.002	1.002 1.001 1.004 0.998	1.000 1.001 0.996 0.996 0.996	0.996 0.996		
	31				1.002	1.002 1.027 1.005 1.005	1.011 1.002 0.993 0.993	0.993		
	30				1.009	1.009 1.015 0.999 1.003 0.998	1.007 1.002 0.995 0.997 0.995	0.995 0.995 0.995 0.995		
	23				0.997	0.997 1.018 0.999 1.001	1.003 0.999 0.996 1.004	0.991 0.991 0.991 0.991		
	28				1.002	1.002 1.005 1.000 0.998	1.006 0.999 1.002 1.001	0.999 1.002 1.002 1.002	1.002	
	27				1.005	1.005 1.004 1.004 0.999	1.009 1.000 0.998 0.997 1.003	0.999 1.000 1.000 1.000	1.000	
	88				1.007	1.007 1.002 1.001 0.999	1.006 0.998 0.996 0.999	1.000 1.001 0.997 1.068	1.068 1.068	
	52				1.008	1.008 0.999 1.001 0.999	1.003 0.999 0.999 1.003	1.000 1.000 1.000 0.999	1.017 1.012 1.005 1.005	
	24				1.005	1.005 1.018 1.001 0.998	1.004 0.998 0.998 0.998	0.999 1.000 1.000 1.000	1.006 1.028 0.977 1.011	
	23				1.005	1.005 1.019 1.001 0.999	1.005 0.998 0.999 1.003	00001	1.000 1.051 0.977 0.990	0.990
	22				1.005	1.005 1.002 1.002 0.999	1.005 0.998 0.998 1.003	0.999 1.000 1.000 1.000	1.000 1.000 0.997 1.037 0.982	1.020
	21				1.001	1.001 1.002 1.004	1.002 0.998 0.996 0.996 0.999	1.000 0.998 0.999 1.001	1.000 0.999 0.992 1.052	1.007
	20				1.006	1.006 1.000 1.003 0.999	1.006 0.995 0.998 0.996 0.997	0.999 1.000 0.998 0.999	1.000 1.000 1.000 1.000	1.038
	19				1.008	1.008 1.0001 1.0001	1.000 1.000 0.998 0.998 0.998	0.998 0.998 1.000 0.999	0.998 1.001 1.000 0.999	1.069
	18				1.006	1.006	1.002 0.997 0.998 0.998	0.999 0.999 0.998 0.998	1.0001	1.001
	17				1.000	0.983 0.983 0.983 0.999 0.999	1,003 1,005 1,003 1,003	0.996 1.000 1.011 0.978 1.004	1,000	1.000
	16	00000	000000	00000	000000	000000	000000	000000	000000	0.000
PEBD Years of	Service	Under 1 1 2 3 4	v ∞ ≻ ∞ o	0112211	10 10 10 10 10 10 10 10 10 10 10 10 10 1	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	25 26 28 28 29	33 33 34 34	35 37 38 39	4 4 4 4 4 4

RIPTION: Non-Selected Reserve with 20 Good Years ('Grey Area') Promotion and Merit Increase scales (PAMS)
Arrayed by entry age, completed PEBD YOS, and paygrade (officer/enlisted).
Additional basic pay increases (beyond across-the-board) eamed in Grey Area status during a fiscal year.
Paygrade transfers and Grey Area transfer blow-ups are excluded in the development.
Blank cells should be considered a value of zero (0.000').

Enlisted Non-Selected Reserve with 20 Good Years Promotion and Merit Increase Scales (PAMS)

	49									
	48									
	47									
	46									
	42									
	4				0.946					
	43				0.946	0.946				
	45				0.946	0.946				
	41				0.946	0.946 0.946 0.946				
•	40				0.946	0.946 0.946 0.946 0.946				
By Entry Age	33				0.975	0.975 0.975 0.975 0.975				
By En	38				1.002	1.000 0.976 0.976 0.976 0.976	0.976			
	37				1.003	0.995 1.013 0.939 0.902	0.975			
	36				7.200	0.996 1.017 1.000 1.005 0.977	0.927 1.000 1.000			
	32				1.004	1.001 1.019 0.999 1.010 0.990	0.966 0.962 0.962 0.962			
	ष्ठ				1.002	1.003 1.017 0.998 1.010	1.029 0.925 0.965 0.994 0.994			
	33				0.964	1.000 1.015 1.014 1.011	1.035 0.997 0.930 0.961 0.980	0.980		
	32				1.000	0.995 1.014 0.996 1.009	1.033 0.999 0.998 0.956 1.000	0.997		
	31				1.003	1.003 1.018 1.010 1.010	1.034 1.000 1.000 0.998 0.915	1.069		
	30				1.012	0.989 1.023 1.010 0.999	1.031 1.000 1.000 0.994	0.935 0.978 1.006 1.006		
	83				1.000	1.000 1.016 0.999 1.008	1.027 1.000 1.000 1.005	0.993 0.981 1.022 1.022		
	28				1.005	1.000 1.015 0.999 1.006 1.000	1.030 1.000 0.999 0.999 1.005	1.000 0.990 0.892 0.990 1.024	1.024	
	27				1.016	1.001 1.010 1.010 1.001	1.031 1.000 1.000 0.999 1.005	1.000 0.999 0.987 0.911 1.033	1.025	
	8				0.992	0.997 1.016 1.010 1.010 0.999	1.029 0.999 0.999 1.000	0.999 1.000 1.000 0.999 0.927	1.015 0.987 0.987	
	52				1.001	1.001 1.015 1.010 0.999	1.030 0.999 1.000 1.003	0.999 1.000 0.999 1.003 0.999	0.949 1.008 1.009	
	54				1.008	1.001 1.000 1.009 1.009	1.031 0.999 1.000 1.003	0001 0001 0001 0001 0001	1.007 0.933 0.966 1.012 1.012	
	23				1.012	1,000 1,019 1,010 1,000	1,000 1,000 1,000 1,000	1000	1.000 0.997 0.981 1.002	1.002
	22				1.003	1.001 1.017 1.010 1.011	1.032 0.999 1.000 1.004	001 1,000 1,000 1,000	1.000 1.000 0.917 0.967	0.992
	21				1.011	1.000 1.017 1.011 0.999	1.033 1.000 0.999 1.003	0.999 1.000 1.003	1.000 1.000 0.996 0.911	0.999
	20				1.012	1.001 1.010 1.010 1.000	1.032 0.999 1.000 1.004	1.000	1.000 1.000 1.000 0.996	0.984
	19				1.002	1.000 1.020 1.011 1.011	1.000 1.000 0.999 1.004	1.000 0.999 1.004 0.999	1.000	0.996
	18				1.010	0.999 1.020 0.999 1.011	1.035 0.999 1.000 0.999 1.005	1.000	0.999 1.000 1.006 0.999 1.000	1.000
	17				1.000	1.021 0.999 1.014 1.000	1,037 1,002 1,000 1,005	0.999 0.997 0.998 1.002	0.997 1.005 1.006 1.006	1.000
	16	000000	000000	000000	000000	000000	000000	000000	000000	0.000
PEBD Years of	Service	Under 1 2 3 4	u o ≻ ∞ o	0 = 2 5 4	5 5 7 5 6	20 23 23 24	25 27 28 29	33 33 34 34	35 37 38 39	4 4 1 1

Non-Selected Reserve with 20 Good Years ('Grey Area') Promotion and Merit Increase scales (PAMS) Arrayed by enty age, completed PEBD YOS, and paygrade (officer/enlisted).
Additional basic pay increases (beyond across-the-board) earned in Grey Area status during a fiscal year. Paygrade transfers and Grey Area transfer blow-ups are excluded in the development.
Blank cells should be considered a value of zero ('0.000').

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APPENDIX I

RETIREE AND SURVIVOR RATES

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RETIREE AND SURVIVOR RATES DESCRIPTION

The military retiree and survivor decrement rates are used to project death, "other" losses from 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 (P.L.) 108-136), DoD- and Treasury-specific "other" loss rates, among others, are developed. The rates are arrayed by age nearest birthday for officers and enlisted separately, and by retirement type--nondisability, temporary disability, and permanent disability. For temporary disability retirees, select rates were created for each of the first five years of retirement. After a certain number of years, those who are still in the temporary disability status are transferred to a permanent disability status.¹

The data for the retiree and survivor rates were taken from files maintained by the Defense Manpower Data Center (DMDC) as of September 30 for the years 2007 through 2016. These files were created by the Defense Finance and Accounting Service (DFAS), which has 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 page following the formulas.

Note to Reader:

Some death rates are greater than 1.00000 in this appendix because the death rates are expressed as central rates. These death rates should not be compared to other published rates or used for other purposes without carefully examining the exposure formula used in their derivation.

P.L. 114-328 changed the maximum temporary disability period from five years to three years for members placed on temporary disability after January 1, 2017. Members placed on temporary disability prior to that date were grandfathered. Temporary disabled retirees in the starting census in this valuation with more than three years were set equal to three years, and the three year rates were applied to them. Hence, the temporary disability rates shown in this report only go through three years. Notwithstanding what is shown in the rates, those still remaining on temporary disability at the end of the temporary disability period are assumed to be transferred to permanent disability.

RETIREE AND SURVIVOR DECREMENT RATE FORMULAS

<u>DEATH OF NONDISABILITY RETIREES</u> (by age nearest birthday and retired from active/reserve duty)

Nondisability deaths during the year
[Number at beginning of year - ½ (Nondisability deaths + other losses)]

DEATH OF PERMANENT DISABILITY RETIREES (by age nearest birthday)

<u>Permanent disability deaths during the year</u> [Number at beginning of year - ½ (Permanent disability deaths + other losses)]

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

Temporary disability deaths in category during the year²
[Number at beginning of year - ½ (Deaths + transfers + other losses)]

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

Losses other than death during the year

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 disability during the year

Number at beginning of year

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

<u>Transfers to permanent disability during the year</u>
Number at beginning of year

OTHER LOSSES FROM PERMANENT DISABILITY (by age nearest birthday)

Losses other than death during the year Number at beginning of year

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. Determined for each year of the temporary disability retirement category.

RETIREE AND SURVIVOR DECREMENT RATE FORMULAS (cont.)

<u>DIVORCE OF RETIREE</u> (weighted by coverage amount, by age nearest birthday)

Net retiree divorces during the year
Number at beginning of year

REMARRIAGE OF SURVIVING SPOUSE (by age nearest birthday)

Surviving spouse remarriages during the year Number at beginning of year

TERMINATION OF SURVIVING CHILD (by age nearest birthday)

Child terminations during the year Number at beginning of year

DEATH OF SURVIVING SPOUSE (by age nearest birthday)³

Surviving spouse deaths during the year

Number at beginning of year

OTHER LOSS OF SURVIVING SPOUSE (by age nearest birthday)

Survivor losses other than deaths during the year
Number at beginning of year

Death rates of spouses of living retirees who elected SBP spouse, or spouse & child, coverage are based on a standard actuarial mortality table using data from private, public, and federal pension plans. This table is published by the Society of Actuaries (SOA) as 'RPH-2014 – Female/Male Tables.'

SUMMARY OF YEARS ON WHICH RETIREE AND SURVIVOR RATES ARE BASED

By Fiscal Year

DEATH RATES ND Officer/Enlisted PD Officer/Enlisted	<u>2007</u>	2008	<u>2009</u>	2010 X	2011 X	2012 X	<u>2013</u>	<u>2014</u> X	2015 X	2016 X
TD Officer/Enlisted	X	X	X	X						
OTHER LOSS RATES ND Officer/Enlisted				X	X	X		V	V	v
PD Officer/Enlisted TD Officer/Enlisted	X	X	X	X				X	X	X
TRANSFER RATES FROM TD TO PD Officer/Enlisted	X	X	X	X						
RETIREE DIVORCE		X	X							
SURVIVOR RATES Remarriage Child Coverage Termination Surviving Spouse Death Surviving Spouse Other Loss								X X X X	X X X X	X X X X

OFFICER RETIRED DEATH RATES

	Non-Di	sability	Permanent		mporary Disab	-
Age	Active	Reserve	Disability	One	Two	Three
		110,501,10	Distibility			
16	0.00037	0.00038	0.00265	0.00939	0.00890	0.00841
17	0.00037	0.00038	0.00265	0.00939	0.00890	0.00841
18	0.00037	0.00038	0.00265	0.00939	0.00890	0.00841
19	0.00037	0.00038	0.00265	0.00939	0.00890	0.00841
20	0.00037	0.00038	0.00265	0.00939	0.00890	0.00841
21	0.00037	0.00038	0.00265	0.00939	0.00890	0.00841
22	0.00037	0.00038	0.00265	0.00939	0.00890	0.00841
23	0.00037	0.00038	0.00268	0.00939	0.00890	0.00841
24	0.00037	0.00038	0.00272	0.00939	0.00890	0.00841
25	0.00037	0.00038	0.00277	0.00939	0.00890	0.00841
26	0.00037	0.00038	0.00284	0.00939	0.00890	0.00841
27	0.00037	0.00038	0.00291	0.00939	0.00890	0.00841
28	0.00037	0.00038	0.00297	0.00939	0.00890	0.00841
29	0.00037	0.00038	0.00303	0.00939	0.00890	0.00841
30	0.00037	0.00038	0.00308	0.00939	0.00890	0.00841
31	0.00038	0.00041	0.00312	0.00939	0.00890	0.00841
32	0.00040	0.00044	0.00315	0.00939	0.00890	0.00841
33	0.00042	0.00048	0.00317	0.00939	0.00890	0.00841
34	0.00044	0.00051	0.00318	0.00939	0.00890	0.00841
35	0.00046	0.00055	0.00341	0.00939	0.00890	0.00841
36	0.00048	0.00059	0.00341	0.00939	0.00890	0.00841
37	0.00050	0.00064	0.00341	0.00939	0.00890	0.00841
38	0.00052	0.00067	0.00339	0.00939	0.00890	0.00841
39	0.00054	0.00072	0.00337	0.00939	0.00890	0.00841
40	0.00056	0.00078	0.00273	0.00939	0.00890	0.00841
41	0.00059	0.00084	0.00270	0.00939	0.00890	0.00841
42	0.00062	0.00090	0.00267	0.00939	0.00890	0.00841
43	0.00065	0.00097	0.00264	0.00939	0.00890	0.00841
44	0.00068	0.00104	0.00260	0.00939	0.00890	0.00841
45	0.00070	0.00112	0.00399	0.00939	0.00890	0.00841
46	0.00073	0.00121	0.00362	0.00939	0.00890	0.00841
47	0.00077	0.00130	0.00333	0.00939	0.00890	0.00841
48	0.00085	0.00139	0.00311	0.00939	0.00890	0.00841
49	0.00096	0.00150	0.00296	0.00939	0.00890	0.00841
50	0.00108	0.00160	0.00289	0.00939	0.00890	0.00841
51	0.00118	0.00172	0.00288	0.00939	0.00890	0.00841
52 53	0.00131	0.00185	0.00295	0.00939	0.00890	0.00841
53 54	0.00144 0.00157	0.00199	0.00310	0.00939 0.00939	0.00890	0.00841
55		0.00214	0.00332		0.00890	0.00841 0.00841
	0.00171	0.00229	0.00362	0.00939 0.00939	0.00890 0.00890	0.00841
56 57	0.00187 0.00205	0.00246 0.00264	0.00400 0.00447	0.00939	0.00890	0.00841
58	0.00203	0.00204	0.00503	0.00939	0.00890	0.00841
59	0.00223	0.00284	0.00569	0.00939	0.00890	0.00841
60	0.00277	0.00304	0.00509	0.00939	0.00890	0.00841
61	0.00277	0.00327	0.00728	0.00939	0.00890	0.00841
62	0.00348	0.00338	0.00728	0.00939	0.00890	0.00841
63	0.00348	0.00376	0.00925	0.00939	0.00890	0.00841
64	0.00449	0.00498	0.01037	0.00939	0.00890	0.00841
65	0.00511	0.00558	0.01157	0.00939	0.00890	0.00841

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

OFFICER RETIRED DEATH RATES (continued)

				Temporary Disal	•
	Non-Di	sability	Permanent	Year of Retirem	ient
Age	Active	Reserve	Disability	One Two	Three
66	0.00583	0.00625	0.01285		
67	0.00667	0.00700	0.01423		
68	0.00765	0.00781	0.01573		
69	0.00879	0.00872	0.01740		
70	0.01012	0.00975	0.01929		
71	0.01167	0.01092	0.02146		
72	0.01347	0.01230	0.02396		
73	0.01555	0.01390	0.02686		
74	0.01794	0.01578	0.03020		
75	0.02070	0.01799	0.03405		
76	0.02388	0.02060	0.03405		
70 77	0.02752	0.02000	0.04350		
78 70	0.03171	0.02734	0.04923	7 .	
79	0.03651	0.03164	0.05571		
80	0.04199	0.03669	0.06301	NON	
81	0.04826	0.04263	0.07116	•	
82	0.05541	0.04958	0.08024	7 .	
83	0.06356	0.05766	0.09031		
84	0.07280	0.06703	0.10143	(H)	
85	0.08322	0.07775	0.11368	-	
86	0.09497	0.08992	0.12718		
87	0.10814	0.10356	0.14201	\triangleright	
88	0.12280	0.11865	0.15823		
89	0.13902	0.13516	0.17593	\mathcal{I}	
90	0.15683	0.15301	0.19515	\Box	
91	0.17629	0.17214	0.21594	$\overline{}$	
92	0.19740	0.19248	0.23834	\Box	
93	0.22017	0.21394	0.26241	7-3	
94	0.24460	0.23647	0.28816	マ	
95	0.27071	0.26004	0.31565	*	
96	0.29855	0.28467	0.34496		
97	0.33123	0.31409	0.37607		
98	0.37073	0.35064	0.40899		
99	0.41807	0.39539	0.44374		`
100	0.47348	0.44850	0.47859	4	1
101	0.53541	0.50944	0.51439	Υ-	<u> </u>
102	0.60403	0.57731	0.55305	•	
103	0.67852	0.65112	0.59393		
104	0.75810	0.72992	0.63714		6
105	0.84228	0.81323	0.68351		55
106	0.93125	0.90130	0.73328		J 1
107	1.02582	0.99538	0.78670		
108	1.12503	1.09448	0.84402		
109	1.22753	1.19740	0.90550		
110	1.33145	1.30237	0.90330		
111	1.53533	1.51250	1.12124		
111	1.53533	1.51250	1.12124		
112					
	1.62881	1.60915	1.20289		
114	1.71359	1.69756	1.29048		
115	1.78758	1.77547	1.38443		
116	1.84922	1.83991	1.48213		
117	1.89743	1.89055	1.59743		

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

ENLISTED RETIRED DEATH RATES

	Non-Di	isability	Permanent		mporary Disab	
Age	Active	Reserve	Disability	One	Two	Three
					·	
16	0.00033	0.00041	0.00104	0.00616	0.00565	0.00514
17	0.00033	0.00041	0.00104	0.00616	0.00565	0.00514
18	0.00033	0.00041	0.00104	0.00616	0.00565	0.00514
19	0.00033	0.00041	0.00104	0.00616	0.00565	0.00514
20	0.00033	0.00041	0.00104	0.00616	0.00565	0.00514
21	0.00033	0.00041	0.00104	0.00616	0.00565	0.00514
22	0.00033	0.00041	0.00104	0.00616	0.00565	0.00514
23	0.00033	0.00041	0.00209	0.00616	0.00565	0.00514
24	0.00033	0.00041	0.00212	0.00616	0.00565	0.00514
25	0.00033	0.00041	0.00216	0.00616	0.00565	0.00514
26	0.00033	0.00041	0.00222	0.00616	0.00565	0.00514
27	0.00033	0.00041	0.00228	0.00616	0.00565	0.00514
28	0.00033	0.00041	0.00234	0.00616	0.00565	0.00514
29	0.00033	0.00041	0.00239	0.00616	0.00565	0.00514
30	0.00033	0.00041	0.00244	0.00616	0.00565	0.00514
31	0.00035	0.00044	0.00248	0.00616	0.00565	0.00514
32	0.00038	0.00049	0.00253	0.00616	0.00565	0.00514
33	0.00041	0.00053	0.00257	0.00616	0.00565	0.00514
34	0.00044	0.00058	0.00261	0.00616	0.00565	0.00514
35	0.00047	0.00063	0.00266	0.00616	0.00565	0.00514
36	0.00051	0.00069	0.00272	0.00616	0.00565	0.00514
37	0.00055	0.00075	0.00278	0.00616	0.00565	0.00514
38	0.00059	0.00081	0.00285	0.00616	0.00565	0.00514
39	0.00063	0.00089	0.00291	0.00616	0.00565	0.00514
40	0.00068	0.00097	0.00297	0.00616	0.00565	0.00514
41	0.00072	0.00105	0.00303	0.00616	0.00565	0.00514
42	0.00078	0.00115	0.00309	0.00616	0.00565	0.00514
43	0.00083	0.00125	0.00316	0.00616	0.00565	0.00514
44	0.00089	0.00136	0.00324	0.00616	0.00565	0.00514
45	0.00096	0.00149	0.00334	0.00616	0.00565	0.00514
46	0.00103	0.00162	0.00348	0.00616	0.00565	0.00514
47	0.00112	0.00177	0.00366	0.00616	0.00565	0.00514
48	0.00124	0.00193	0.00389	0.00616	0.00565	0.00514
49	0.00138	0.00210	0.00419	0.00616	0.00565	0.00514
50	0.00156	0.00228	0.00455	0.00616	0.00565	0.00514
51	0.00180	0.00249	0.00498	0.00616	0.00565	0.00514
52	0.00209	0.00271	0.00549	0.00616	0.00565	0.00514
53	0.00241	0.00295	0.00608	0.00616	0.00565	0.00514
54	0.00278	0.00322	0.00675	0.00616	0.00565	0.00514
55	0.00322	0.00350	0.00751	0.00616	0.00565	0.00514
56	0.00371	0.00381	0.00834	0.00616	0.00565	0.00514
57	0.00428	0.00416	0.00926	0.00616	0.00565	0.00514
58	0.00494	0.00452	0.01026	0.00616	0.00565	0.00514
59	0.00569	0.00493	0.01136	0.00616	0.00565	0.00514
60	0.00655	0.00537	0.01256	0.00616	0.00565	0.00514
61	0.00754	0.00592	0.01386	0.00616	0.00565	0.00514
62	0.00863	0.00659	0.01527	0.00616	0.00565	0.00514
63	0.00986	0.00738	0.01680	0.00616	0.00565	0.00514
64	0.01123	0.00830	0.01844	0.00616	0.00565	0.00514
65	0.01274	0.00933	0.02020	0.00616	0.00565	0.00514

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

ENLISTED RETIRED DEATH RATES (continued)

					mporary Disab	
	Non-Di	sability	Permanent	Ye	ear of Retireme	ent
Age	Active	Reserve	Disability	One	Two	Three
	0.04.440	0.04040	0.00010			
66	0.01440	0.01049	0.02210			
67	0.01622	0.01178	0.02417			
68	0.01821	0.01321	0.02644			
69	0.02040	0.01480	0.02897			
70	0.02280	0.01657	0.03183			
71	0.02544	0.01853	0.03506			
72	0.02833	0.02074	0.03871			
73	0.03151	0.02322	0.04279			
74	0.03503	0.02603	0.04733			
75	0.03894	0.02924	0.05234			
76	0.04328	0.03290	0.05785			
77	0.04810	0.03709	0.06389			
78	0.05346	0.04191	0.07050			
79	0.05939	0.04741	0.07772			
80	0.06593	0.05370	0.08560	NON		
81	0.07317	0.06083	0.09416	<u> </u>		
82	0.08116	0.06890	0.10345		•	
83	0.08996	0.07795	0.11350		₹.	
84	0.09967	0.08804	0.12437	7	<u> </u>	
85	0.11036	0.09921	0.13611	_		
86	0.12212	0.11152	0.14880		_	
87	0.13503	0.12499	0.16247			
88	0.14915	0.13965	0.17714		$\overline{}$	
89	0.16451	0.15553	0.19284		\mathcal{I}	
90	0.18118	0.17263	0.20956		\vdash	
91	0.19922	0.19094	0.22729			
92	0.21864	0.21046	0.24606		Ħ	
93	0.23947	0.23118	0.26586		_	
94	0.26177	0.25310	0.28672		7 0	
95	0.28555	0.27626	0.30866			
96	0.31090	0.30098	0.33176		_	
97	0.34033	0.33085	0.35600			
98	0.37542	0.36805	0.38137			
99	0.41685	0.41354	0.40788		(\mathcal{L}_{1})	L
100	0.46467	0.46726	0.43397		_	4
101	0.51454	0.52840	0.46942		7	- 7
102	0.56861	0.59577	0.50713			
103	0.62596 0.68591	0.66818	0.54724			
104		0.74454	0.58989			$\mathcal{O}_{\mathcal{I}}$
105	0.74814	0.82437	0.63588			5
106	0.81326	0.90800	0.68547			
107	0.88245	0.99694	0.73896			
108	0.95547	1.09040	0.79662			
109	1.03192	1.18730	0.85878			
110	1.11127	1.28618	0.92578			
111	1.27849	1.48929	1.07887			
112	1.27849	1.48929	1.07887			
113	1.36136 1.44288	1.58261	1.16302			
114	1.44288	1.66943	1.25372			
115	1.52160	1.74775	1.35150			
116		1.81425	1.45385			
117	1.67131	1.86721	1.57452			

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

ACTIVE DUTY OTHER LOSSES FROM NONDISABILITY

	D	oD	Tre	asury		D	oD	Tre	asury
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted
16	0.0000	0.0000	0.0000	0.0000	56	0.0001	0.0041	0.0000	0.0000
17	0.0000	0.0000	0.0000	0.0000	57	0.0002	0.0043	0.0000	0.0000
18	0.0000	0.0000	0.0000	0.0000	58	0.0003	0.0047	0.0000	0.0000
19	0.0000	0.0000	0.0000	0.0000	59	0.0004	0.0051	0.0000	0.0000
20	0.0000	0.0000	0.0000	0.0000	60	0.0005	0.0056	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000	61	0.0006	0.0061	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000	62	0.0007	0.0066	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	63	0.0009	0.0072	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000	64	0.0010	0.0078	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	65	0.0011	0.0083	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000	66	0.0013	0.0089	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000	67	0.0014	0.0094	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000	68	0.0015	0.0099	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000	69	0.0017	0.0104	0.0000	0.0000
30	0.0068	0.0363	0.0000	0.0000	70	0.0018	0.0108	0.0000	0.0000
31	0.0068	0.0363	0.0000	0.0000	71	0.0019	0.0111	0.0000	0.0000
32	0.0068	0.0363	0.0000	0.0000	72	0.0019	0.0114	0.0000	0.0000
33	0.0068	0.0363	0.0000	0.0000	73	0.0020	0.0116	0.0000	0.0000
34	0.0068	0.0363	0.0000	0.0000	74	0.0021	0.0117	0.0000	0.0000
35	0.0068	0.0363	0.0000	0.0000	75	0.0021	0.0117	0.0000	0.0000
36	0.0068	0.0363	0.0000	0.0000	76	0.0021	0.0116	0.0000	0.0000
37	0.0068	0.0363	0.0000	0.0000	77	0.0021	0.0114	0.0000	0.0000
38	0.0068	0.0363	0.0000	0.0000	78	0.0021	0.0111	0.0000	0.0000
39	0.0068	0.0313	0.0000	0.0000	79	0.0020	0.0107	0.0000	0.0000
40	0.0057	0.0269	0.0000	0.0000	80	0.0019	0.0102	0.0000	0.0000
41	0.0048	0.0230	0.0000	0.0000	81	0.0018	0.0095	0.0000	0.0000
42	0.0040	0.0196	0.0000	0.0000	82	0.0017	0.0088	0.0000	0.0000
43	0.0033	0.0166	0.0000	0.0000	83	0.0015	0.0078	0.0000	0.0000
44	0.0026	0.0140	0.0000	0.0000	84	0.0013	0.0068	0.0000	0.0000
45	0.0021	0.0118	0.0000	0.0000	85	0.0011	0.0056	0.0000	0.0000
46	0.0016	0.0099	0.0000	0.0000	86	0.0008	0.0042	0.0000	0.0000
47	0.0013	0.0083	0.0000	0.0000	87	0.0005	0.0027	0.0000	0.0000
48	0.0009	0.0070	0.0000	0.0000	88	0.0002	0.0010	0.0000	0.0000
49	0.0007	0.0060	0.0000	0.0000	89	0.0000	0.0000	0.0000	0.0000
50	0.0005	0.0052	0.0000	0.0000	90	0.0000	0.0000	0.0000	0.0000
51	0.0003	0.0046	0.0000	0.0000	91	0.0000	0.0000	0.0000	0.0000
52	0.0002	0.0042	0.0000	0.0000	92	0.0000	0.0000	0.0000	0.0000
53	0.0001	0.0039	0.0000	0.0000	93	0.0000	0.0000	0.0000	0.0000
54	0.0001	0.0038	0.0000	0.0000	94	0.0000	0.0000	0.0000	0.0000
55	0.0001	0.0039	0.0000	0.0000	95	0.0000	0.0000	0.0000	0.0000

^{***} The above DoD/Treasury distinction is needed for P.L. 108-136 calculations. "Treasury" rates of '0.0000' are shown for effect.

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

RESERVE DUTY OTHER LOSSES FROM NONDISABILITY

	D	00D	Tre	asury		D	oD	Tre	asury
Age	Officer	Enlisted	Officer	Enlisted	Age	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	0.0016	0.0115	0.0000	0.0000
21	0.0000	0.0000	0.0000	0.0000	61	0.0034	0.0176	0.0000	0.0000
22	0.0000	0.0000	0.0000	0.0000	62	0.0023	0.0184	0.0000	0.0000
23	0.0000	0.0000	0.0000	0.0000	63	0.0028	0.0150	0.0000	0.0000
24	0.0000	0.0000	0.0000	0.0000	64	0.0030	0.0114	0.0000	0.0000
25	0.0000	0.0000	0.0000	0.0000	65	0.0032	0.0107	0.0000	0.0000
26	0.0000	0.0000	0.0000	0.0000	66	0.0032	0.0085	0.0000	0.0000
27	0.0000	0.0000	0.0000	0.0000	67	0.0037	0.0080	0.0000	0.0000
28	0.0000	0.0000	0.0000	0.0000	68	0.0029	0.0061	0.0000	0.0000
29	0.0000	0.0000	0.0000	0.0000	69	0.0027	0.0053	0.0000	0.0000
30	0.0000	0.0000	0.0000	0.0000	70	0.0025	0.0054	0.0000	0.0000
31	0.0000	0.0000	0.0000	0.0000	71	0.0019	0.0029	0.0000	0.0000
32	0.0000	0.0000	0.0000	0.0000	72	0.0020	0.0037	0.0000	0.0000
33	0.0000	0.0000	0.0000	0.0000	73	0.0013	0.0029	0.0000	0.0000
34	0.0000	0.0000	0.0000	0.0000	74	0.0018	0.0036	0.0000	0.0000
35	0.0000	0.0000	0.0000	0.0000	75	0.0020	0.0021	0.0000	0.0000
36	0.0000	0.0000	0.0000	0.0000	76	0.0020	0.0027	0.0000	0.0000
37	0.0000	0.0000	0.0000	0.0000	77	0.0017	0.0041	0.0000	0.0000
38	0.0000	0.0000	0.0000	0.0000	78	0.0020	0.0031	0.0000	0.0000
39	0.0000	0.0000	0.0000	0.0000	79	0.0025	0.0035	0.0000	0.0000
40	0.0000	0.0000	0.0000	0.0000	80	0.0007	0.0040	0.0000	0.0000
41	0.0000	0.0000	0.0000	0.0000	81	0.0007	0.0028	0.0000	0.0000
42	0.0000	0.0000	0.0000	0.0000	82	0.0017	0.0026	0.0000	0.0000
43	0.0000	0.0000	0.0000	0.0000	83	0.0010	0.0047	0.0000	0.0000
44	0.0000	0.0000	0.0000	0.0000	84	0.0023	0.0013	0.0000	0.0000
45	0.0000	0.0000	0.0000	0.0000	85	0.0016	0.0042	0.0000	0.0000
46	0.0000	0.0000	0.0000	0.0000	86	0.0011	0.0043	0.0000	0.0000
47	0.0000	0.0000	0.0000	0.0000	87	0.0008	0.0051	0.0000	0.0000
48	0.0000	0.0000	0.0000	0.0000	88	0.0016	0.0019	0.0000	0.0000
49	0.0000	0.0000	0.0000	0.0000	89	0.0016	0.0027	0.0000	0.0000
50	0.0000	0.0000	0.0000	0.0000	90	0.0017	0.0011	0.0000	0.0000
51	0.0000	0.0000	0.0000	0.0000	91	0.0030	0.0023	0.0000	0.0000
52	0.0000	0.0000	0.0000	0.0000	92	0.0010	0.0042	0.0000	0.0000
53	0.0000	0.0000	0.0000	0.0000	93	0.0021	0.0032	0.0000	0.0000
54	0.0000	0.0000	0.0000	0.0000	94	0.0012	0.0049	0.0000	0.0000
55	0.0000	0.0000	0.0000	0.0000	95	0.0000	0.0000	0.0000	0.0000

^{***} The above DoD/Treasury distinction is needed for P.L. 108-136 calculations. "Treasury" rates of '0.0000' are shown for effect.

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

OTHER LOSS AND NONTRANSFER LOSSES FROM TEMPORARY DISABILITY ***

(Age Nearest Birthday)

	-	Officers			Enlisted	
		ear of Retireme			Year of Retirem	ont
Age	One	Two	Three	One	Two	Three
Age				<u>One</u>		111166
16	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
17	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
18	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
19	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
20	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
21	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
22	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
23	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
24	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
25	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
26	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
27	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
28	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
29	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
30	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
31	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
32	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
33	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
34	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
35	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
36	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
37	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
38	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
39	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
40	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
41	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
42 43	0.0264 0.0264	0.0881 0.0881	0.2771 0.2771	0.1740	0.2433 0.2433	0.5598 0.5598
43 44		0.0881		0.1740	0.2433	
44	0.0264 0.0264	0.0881	0.2771 0.2771	0.1740 0.1740	0.2433	0.5598 0.5598
46	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
47	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
48	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
49	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
50	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
51	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
52	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
53	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
54	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
55	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
56	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
57	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
58	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
59	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
60	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
61	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
62	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
63	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
64	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598
65	0.0264	0.0881	0.2771	0.1740	0.2433	0.5598

Year of Retirement						
One Two Three						
1.639	1.176	1.070				

Year of Retirement						
One	Three					
1.368	1.228	1.067				

Example: The DoD-specific Other/Nontransfer Loss rate (across all ages) for Officers in Year One of Retirement would be 0.0433, the product of 0.0264 and 1.639.

TRANSFER RATES FROM TEMPORARY DISABILITY TO PERMANENT DISABILITY

	Officers Year of Retirement		Enlisted		
			Year of Retirement		
Age	One	Two	One	Two	
16	0.1281	0.1740	0.0626	0.0947	
17	0.1281	0.1740	0.0626	0.0947	
18	0.1281	0.1740	0.0626	0.0947	
19	0.1281	0.1740	0.0626	0.0947	
20	0.1281	0.1740	0.0626	0.0947	
21	0.1281	0.1740	0.0626	0.0947	
22	0.1281	0.1740	0.0626	0.0947	
23	0.1281	0.1740	0.0626	0.0947	
24	0.1281	0.1740	0.0626	0.0947	
25	0.1281	0.1740	0.0626	0.0947	
26	0.1281	0.1740	0.0626	0.0947	
27	0.1281	0.1740	0.0626	0.0947	
28	0.1281	0.1740	0.0626	0.0947	
29	0.1281	0.1740	0.0626	0.0947	
30	0.1281	0.1740	0.0626	0.0947	
31	0.1281	0.1740	0.0626	0.0947	
32	0.1281	0.1740	0.0626	0.0947	
33	0.1281	0.1740	0.0626	0.0947	
34	0.1281	0.1740	0.0626	0.0947	
35	0.1281	0.1740	0.0626	0.0947	
36	0.1281	0.1740	0.0626	0.0947	
37	0.1281	0.1740	0.0626	0.0947	
38	0.1281	0.1740	0.0626	0.0947	
39	0.1281	0.1740	0.0626	0.0947	
40	0.1281	0.1740	0.0626	0.0947	
41	0.1281	0.1740	0.0626	0.0947	
42	0.1281	0.1740	0.0626	0.0947	
43	0.1281	0.1740	0.0626	0.0947	
44	0.1281	0.1740	0.0626	0.0947	
45	0.1281	0.1740	0.0626	0.0947	
46	0.1281	0.1740	0.0626	0.0947	
47	0.1281	0.1740	0.0626	0.0947	
48	0.1281	0.1740	0.0626	0.0947	
49	0.1281	0.1740	0.0626	0.0947	
50	0.1281	0.1740	0.0626	0.0947	
51	0.1281	0.1740	0.0626	0.0947	
52	0.1281	0.1740	0.0626	0.0947	
53	0.1281	0.1740	0.0626	0.0947	
54	0.1281	0.1740	0.0626	0.0947	
55	0.1281	0.1740	0.0626	0.0947	
56	0.1281	0.1740	0.0626	0.0947	
57	0.1281	0.1740	0.0626	0.0947	
58	0.1281	0.1740	0.0626	0.0947	
59	0.1281	0.1740	0.0626	0.0947	
60	0.1281	0.1740	0.0626	0.0947	
61	0.1281	0.1740	0.0626	0.0947	
62	0.1281	0.1740	0.0626	0.0947	
63	0.1281	0.1740	0.0626	0.0947	
64	0.1281	0.1740	0.0626	0.0947	
65	0.1281	0.1740	0.0626	0.0947	
03	0.1261	0.1/40	0.0020	0.094/	

^{***} Those still remaining on temporary disability at the end of the temporary disability period are assumed to be transferred to permanent disability.

OTHER LOSSES FROM PERMANENT DISABILITY

	DoD		Treasury			DoD		Treasury	
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted
16	0.0709	0.3602	0.0344	0.3028	54	0.0119	0.0468	0.0077	0.0215
17	0.0709	0.3602	0.0344	0.3028	55	0.0114	0.0435	0.0073	0.0207
18	0.0709	0.3602	0.0344	0.3028	56	0.0110	0.0408	0.0069	0.0197
19	0.0709	0.3602	0.0344	0.3028	57	0.0107	0.0384	0.0065	0.0186
20	0.0709	0.3346	0.0344	0.2624	58	0.0105	0.0364	0.0061	0.0174
21	0.0709	0.3107	0.0344	0.2253	59	0.0103	0.0347	0.0058	0.0161
22	0.0709	0.2887	0.0344	0.1916	60	0.0102	0.0333	0.0054	0.0146
23	0.0709	0.2685	0.0344	0.1611	61	0.0102	0.0321	0.0051	0.0132
24	0.0709	0.2501	0.0344	0.1339	62	0.0102	0.0312	0.0048	0.0116
25	0.0709	0.2334	0.0344	0.1100	63	0.0102	0.0304	0.0046	0.0102
26	0.0670	0.2186	0.0323	0.0894	64	0.0103	0.0297	0.0043	0.0087
27	0.0633	0.2055	0.0302	0.0720	65	0.0103	0.0291	0.0041	0.0074
28	0.0598	0.1941	0.0283	0.0576	66	0.0103	0.0285	0.0040	0.0062
29	0.0565	0.1842	0.0266	0.0462	67	0.0103	0.0279	0.0038	0.0053
30	0.0533	0.1758	0.0249	0.0376	68	0.0102	0.0273	0.0037	0.0045
31	0.0503	0.1687	0.0234	0.0313	69	0.0101	0.0267	0.0037	0.0040
32	0.0475	0.1625	0.0220	0.0272	70	0.0100	0.0261	0.0036	0.0036
33	0.0448	0.1572	0.0207	0.0248	71	0.0098	0.0254	0.0036	0.0034
34	0.0422	0.1524	0.0195	0.0237	72	0.0095	0.0247	0.0036	0.0034
35	0.0398	0.1479	0.0184	0.0236	73	0.0092	0.0239	0.0036	0.0034
36	0.0375	0.1436	0.0175	0.0242	74	0.0089	0.0231	0.0036	0.0035
37	0.0354	0.1393	0.0166	0.0251	75	0.0086	0.0223	0.0036	0.0037
38	0.0333	0.1348	0.0157	0.0261	76	0.0082	0.0214	0.0037	0.0038
39	0.0313	0.1301	0.0150	0.0270	77	0.0079	0.0205	0.0037	0.0039
40	0.0294	0.1250	0.0143	0.0278	78	0.0075	0.0196	0.0038	0.0040
41	0.0275	0.1195	0.0137	0.0283	79	0.0071	0.0187	0.0038	0.0040
42	0.0258	0.1137	0.0131	0.0285	80	0.0068	0.0177	0.0039	0.0040
43	0.0241	0.1076	0.0125	0.0284	81	0.0064	0.0168	0.0039	0.0039
44	0.0225	0.1013	0.0120	0.0281	82	0.0060	0.0158	0.0040	0.0038
45	0.0210	0.0948	0.0115	0.0277	83	0.0057	0.0148	0.0041	0.0036
46	0.0196	0.0884	0.0111	0.0271	84	0.0054	0.0139	0.0042	0.0033
47	0.0182	0.0820	0.0106	0.0265	85	0.0051	0.0129	0.0043	0.0031
48	0.0170	0.0758	0.0102	0.0258	86	0.0048	0.0119	0.0044	0.0027
49	0.0159	0.0699	0.0098	0.0251	87	0.0046	0.0109	0.0045	0.0024
50	0.0149	0.0644	0.0094	0.0244	88	0.0044	0.0099	0.0047	0.0020
51	0.0140	0.0593	0.0090	0.0238	89	0.0042	0.0089	0.0049	0.0016
52	0.0131	0.0546	0.0085	0.0231	90	0.0041	0.0079	0.0050	0.0012
53	0.0125	0.0504	0.0081	0.0223					

^{***} The above DoD/Treasury distinction is needed for P.L. 108-136 calculations.

^{***} As noted in Item 2 in the Retiree section of Appendix F, additional adjustments are made for retirees who elect SBP spouse coverage.

RETIREE DIVORCE RATES ***

	Active		Active Reserve			Active		Reserve	
Age	Officer	Enlisted	Officer	Enlisted	Age	Officer	Enlisted	Officer	Enlisted
16	0.0900	0.0900	0.0900	0.0900	50	0.0080	0.0080	0.0080	0.0080
17	0.0900	0.0900	0.0900	0.0900	51	0.0070	0.0070	0.0070	0.0070
18	0.0900	0.0900	0.0900	0.0900	52	0.0060	0.0060	0.0060	0.0060
19	0.0900	0.0900	0.0900	0.0900	53	0.0050	0.0050	0.0050	0.0050
20	0.0830	0.0830	0.0830	0.0830	54	0.0050	0.0050	0.0050	0.0050
21	0.0750	0.0750	0.0750	0.0750	55	0.0040	0.0040	0.0040	0.0040
22	0.0680	0.0680	0.0680	0.0680	56	0.0040	0.0040	0.0040	0.0040
23	0.0610	0.0610	0.0610	0.0610	57	0.0030	0.0030	0.0030	0.0030
24	0.0530	0.0530	0.0530	0.0530	58	0.0010	0.0010	0.0010	0.0010
25	0.0460	0.0460	0.0460	0.0460	59	0.0020	0.0020	0.0020	0.0020
26	0.0420	0.0420	0.0420	0.0420	60	0.0040	0.0040	0.0040	0.0040
27	0.0380	0.0380	0.0380	0.0380	61	0.0020	0.0020	0.0020	0.0020
28	0.0360	0.0360	0.0360	0.0360	62	0.0030	0.0030	0.0030	0.0030
29	0.0360	0.0360	0.0360	0.0360	63	0.0010	0.0010	0.0010	0.0010
30	0.0330	0.0330	0.0330	0.0330	64	0.0010	0.0010	0.0010	0.0010
31	0.0310	0.0310	0.0310	0.0310	65	0.0000	0.0000	0.0000	0.0000
32	0.0280	0.0280	0.0280	0.0280	66	0.0000	0.0000	0.0000	0.0000
33	0.0240	0.0240	0.0240	0.0240	67	0.0000	0.0000	0.0000	0.0000
34	0.0200	0.0200	0.0200	0.0200	68	0.0000	0.0000	0.0000	0.0000
35	0.0210	0.0210	0.0210	0.0210	69	0.0000	0.0000	0.0000	0.0000
36	0.0240	0.0240	0.0240	0.0240	70	0.0000	0.0000	0.0000	0.0000
37	0.0310	0.0310	0.0310	0.0310	71	0.0000	0.0000	0.0000	0.0000
38	0.0390	0.0390	0.0390	0.0390	72	0.0000	0.0000	0.0000	0.0000
39	0.0420	0.0420	0.0420	0.0420	73	0.0000	0.0000	0.0000	0.0000
40	0.0370	0.0370	0.0370	0.0370	74	0.0000	0.0000	0.0000	0.0000
41	0.0300	0.0300	0.0300	0.0300	75	0.0000	0.0000	0.0000	0.0000
42	0.0250	0.0250	0.0250	0.0250	76	0.0000	0.0000	0.0000	0.0000
43	0.0190	0.0190	0.0190	0.0190	77	0.0000	0.0000	0.0000	0.0000
44	0.0170	0.0170	0.0170	0.0170	78	0.0000	0.0000	0.0000	0.0000
45	0.0140	0.0140	0.0140	0.0140	79	0.0000	0.0000	0.0000	0.0000
46	0.0130	0.0130	0.0130	0.0130	80	0.0000	0.0000	0.0000	0.0000
47	0.0110	0.0110	0.0110	0.0110	81	0.0000	0.0000	0.0000	0.0000
48	0.0100	0.0100	0.0100	0.0100	82	0.0000	0.0000	0.0000	0.0000
49	0.0080	0.0080	0.0080	0.0080					

^{***} 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 4 in the Reserve Duty 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.

^{***} The "Retiree Divorce" rates are the same for officer/enlisted status, and by active/reserve. The rates are displayed for effect.

SURVIVING SPOUSE REMARRIAGE RATES

Age	Rate	Age	Rate
			
16	0.0100	38	0.0135
17	0.0100	39	0.0135
18	0.0100	40	0.0160
19	0.0100	41	0.0160
20	0.0100	42	0.0160
21	0.0100	43	0.0160
22	0.0100	44	0.0160
23	0.0100	45	0.0125
24	0.0100	46	0.0125
25	0.0100	47	0.0125
26	0.0100	48	0.0125
27	0.0100	49	0.0125
28	0.0100	50	0.0088
29	0.0100	51	0.0088
30	0.0260	52	0.0088
31	0.0260	53	0.0088
32	0.0260	54	0.0088
33	0.0260	55	0.0000
34	0.0260	56	0.0000
35	0.0135	57	0.0000
36	0.0135	58	0.0000
37	0.0135	59	0.0000

SURVIVING CHILD COVERAGE TERMINATION RATES

Age	Rate
0	0.000
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	0.256
18	0.356
19	0.143
20	0.091
21	0.400
22	0.590
23	0.149

SURVIVING SPOUSE DEATH RATES ***

Age	Rate	Age	Rate
0	0.00565	60	0.00791
1	0.00034	61	0.00830
2	0.00022	62	0.00883
3	0.00017	63	0.00951
4	0.00014	64	0.01030
5	0.00013	65	0.01124
6	0.00011	66	0.01230
7	0.00010	67	0.01349
8	0.00009	68	0.01478
9	0.00008	69	0.01618
10	0.00007	70	0.01768
11	0.00010	71	0.01928
12	0.00010	72	0.02098
13	0.00013	73	0.02279
14	0.00015	74	0.02476
15	0.00019	75 76	0.02693
16	0.00023	76	0.02934
17 18	0.00026	77	0.03210
19	0.00039 0.00044	78 79	0.03527 0.03893
20	0.00044	80	0.03893
21	0.00049	81	0.04806
22	0.00059	82	0.05367
23	0.00062	83	0.06006
24	0.00065	84	0.06732
25	0.00068	85	0.07548
26	0.00071	86	0.08462
27	0.00074	87	0.09476
28	0.00077	88	0.10593
29	0.00082	89	0.11815
30	0.00087	90	0.13148
31	0.00093	91	0.14592
32	0.00098	92	0.16152
33	0.00104	93	0.17829
34 35	0.00111 0.00119	94 95	0.19627 0.21546
36	0.00119	93 96	0.21546
37	0.00127	97	0.25760
38	0.00136	98	0.28051
39	0.00157	99	0.30461
40	0.00169	100	0.32988
41	0.00183	101	0.35701
42	0.00199	102	0.38558
43	0.00219	103	0.41563
44	0.00240	104	0.44719
45	0.00263	105	0.48029
46	0.00288	106	0.50460
47	0.00316	107	0.53012
48	0.00347	108	0.55695
49	0.00381	109	0.58513
50	0.00418	110	0.98952
51	0.00456	111	0.99299
52 53	0.00494 0.00533	112 113	0.99299 0.99473
53 54	0.00533	113	0.99473 0.99647
55	0.00571	114	0.99822
56	0.00662	116	1.00000
57	0.00709	118	1.00000
58	0.00753	118	1.00000
59	0.00765	119	1.00000

^{*** &}quot;Surviving Spouses" are defined as spouses of <u>deceased</u> retirees who elected SBP spouse, or spouse & child, coverage.

Rates based on actual plan experience.

SPOUSE DEATH RATES ***

(Age Nearest Birthday)

0	Age	Rate	Age	Rate
1 0.00046 61 0.00347 2 0.00031 62 0.00372 3 0.00024 63 0.00399 4 0.00018 64 0.00428 5 0.00016 65 0.00466 6 0.00015 66 0.00504 7 0.00012 68 0.00666 9 0.00011 69 0.00666 10 0.00010 70 0.00733 11 0.00010 71 0.00733 11 0.00010 71 0.00899 12 0.00011 67 3 0.00892 13 0.00016 73 0.00987 14 0.00021 74 0.01093 15 0.00027 75 0.01211 16 0.00032 76 0.01344 17 0.00037 77 0.01492 18 0.00036 78 0.01659 19 0.00042 80 0.02651 18 0.00039 79 0.01844 20 0.00042 80 0.02651 21 0.00045 81 0.02432 22 0.00046 82 0.02882 23 0.00046 82 0.02882 23 0.00049 83 0.03416 24 0.00051 84 0.04047 25 0.00057 86 0.05666 27 0.00066 87 0.06693 28 0.00051 84 0.04047 25 0.00067 89 0.09292 30 0.00067 89 0.09292 30 0.00067 89 0.09292 31 0.00068 93 0.15620 33 0.00099 97 0.1283 34 0.0019 97 0.12838 35 0.00119 95 0.18603 36 0.00134 99 0.02951 37 0.00149 97 0.22055 38 0.00149 97 0.22055 38 0.00149 97 0.22055 39 0.00149 97 0.22055 34 0.00027 101 0.0221 101 0.22816 34 0.00165 98 0.02991 34 0.00067 89 0.09292 34 0.00067 89 0.09292 35 0.00067 89 0.09292 36 0.00067 89 0.09292 37 0.00060 87 0.06693 38 0.0019 97 0.12836 39 0.0019 97 0.12836 30 0.00073 90 0.10926 31 0.00073 90 0.00073 90 0.10926 31 0.00073 90 0.00073 90 0.10926 31 0.00073 90 0.00073 90 0.10926 31 0.00073 90 0.00073 90 0.10926 31 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.00073 90 0.0007	0	0.00777	60	0.00667
2 0.00031 62 0.00372 3 0.00024 63 0.00372 4 0.00018 64 0.00428 5 0.00016 65 0.00460 6 0.00015 66 0.00504 7 0.00014 67 0.00552 8 0.00012 68 0.00606 9 0.00011 69 0.00666 10 0.00010 70 0.00733 11 0.00010 71 0.00809 12 0.00013 72 0.00892 13 0.00016 73 0.00892 13 0.00016 73 0.00892 14 0.00021 74 0.01093 15 0.00027 75 0.01211 16 0.00032 76 0.01211 17 0.00037 77 0.01492 18 0.00032 76 0.01344 17 0.00037 77 0.01492 20 0.00045 81 0.01659 19 0.00039 79 0.01844 20 0.00045 81 0.02432 22 0.00046 82 0.02882 23 0.00049 83 0.03416 24 0.00051 84 0.04047 25 0.00057 86 0.05666 27 0.00057 86 0.05666 28 0.00057 89 0.0593 31 0.00078 91 0.12836 32 0.00067 89 0.09292 33 0.00067 89 0.09292 34 0.00067 89 0.09292 35 0.00067 89 0.09292 36 0.00067 89 0.09292 37 0.00060 87 0.06693 38 0.00078 91 0.12836 39 0.00078 91 0.12836 30 0.00078 91 0.12836 31 0.00078 91 0.12836 32 0.00087 92 0.14203 33 0.00067 89 0.09292 34 0.00067 89 0.09292 35 0.00064 94 0.17087 36 0.00149 97 0.22851 37 0.00149 97 0.22955 38 0.00067 89 0.09292 30 0.00067 89 0.09292 31 0.00069 93 0.15620 31 0.00078 91 0.12836 32 0.00087 92 0.14203 33 0.00096 93 0.15620 34 0.0016 94 0.17087 35 0.00119 95 0.18603 36 0.00134 96 0.20291 37 0.00149 97 0.22055 38 0.00165 98 0.23898 44 0.00026 100 0.27796 41 0.00227 100 0.27796 41 0.00227 100 0.27796 41 0.00227 100 0.27796 41 0.00239 110 0.46704 48 0.00374 110 0.29815 55 0.00047 111 0.09815 55 0.00047 111 0.09855 55 0.00047 111 0.09855 55 0.00057 118 0.00000				
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58 0.00576 118 0.50000				
59 0.00620 119 0.50000				
	59	0.00620	119	0.50000

^{*** &}quot;Spouses" are defined as spouses of $\underline{\text{living}}$ retirees who elected SBP spouse, or spouse & child, coverage.

Rates based on standard actuarial mortality table -- RPH-2014 - Female/Male Tables'

SURVIVING SPOUSE OTHER LOSS RATES

Age	Rate	Age	Rate
0	0.0000	55	0.0000
1	0.0000	56	0.0000
2	0.0000	57	0.0000
3	0.0000	58	0.0000
4	0.0000	59	0.0000
5	0.0000	60	0.0000
6	0.0000	61	0.0000
7	0.0000	62	0.0000
8	0.0000	63	0.0000
9	0.0000	64	0.0000
10	0.0000	65	0.0000
11	0.0000	66	0.0000
12	0.0000	67	0.0000
13	0.0000	68	0.0000
14	0.0000	69	0.0000
15	0.0000	70	0.0000
16	0.0000	71	0.0000
17	0.0000	72	0.0000
18	0.0000	73	0.0000
19	0.0000	74	0.0000
20	0.0000	75	0.0000
21	0.0000	76	0.0000
22	0.0000	77	0.0000
23	0.0000	78	0.0000
24	0.0000	79	0.0000
25	0.0000	80	0.0000
26	0.0000	81	0.0000
27	0.0000	82	0.0000
28	0.0000	83	0.0000
29	0.0000	84	0.0000
30	0.0000	85	0.0000
31	0.0000	86	0.0000
32	0.0000	87	0.0000
33	0.0000	88	0.0000
34	0.0000	89	0.0000
35	0.0000	90	0.0000
36	0.0000	91	0.0000
37	0.0000	92	0.0000
38	0.0000	93	0.0000
39	0.0000	94	0.0000
40	0.0000	95	0.0000
41	0.0000	96	0.0000
42	0.0000	97	0.0000
43	0.0000	98	0.0000
44	0.0000	99	0.0000
45	0.0000	100	0.0000
46	0.0000	101	0.0000
47	0.0000	102	0.0000
48	0.0000	103	0.0000
49	0.0000	104	0.0000
50	0.0000	105	0.0000
51	0.0000	106	0.0000
52	0.0000	107	0.0000
53	0.0000	108	0.0000
54	0.0000	109	0.0000

^{***} The above Other Loss rates are used to calculate both the DoD and Treasury NCPs per P.L. 108-136. The rates are all '0.0000' and are shown for effect.

APPENDIX J

MORTALITY IMPROVEMENT FACTORS

	<u>Page</u>
Mortality Improvement Factors Description	183
Mortality Improvement Factors (Non- / Permanent Disability, and Active / Reserve Duty)	184
Mortality Improvement Factors (Surviving / Current Spouses)	186

MORTALITY IMPROVEMENT FACTORS DESCRIPTION

Mortality rates in the valuation for active and reserve duty personnel, nondisabled retirees (from Active and Reserve Duty), disabled retirees, and survivors/spouses are decreased (or "improved") over time in order to reflect the long-term trend toward such declines, generally.

Mortality improvement (MI) factors project increasing life expectancies. The MI Full generational factors in this valuation are based on the underlying experience period from FY 2000 through FY 2016 using military-specific data. Methods and assumptions, for graduation/smoothing and projection, utilize similar techniques to those in the Society of Actuaries (SOA) report on mortality improvement factors, titled "MP-2016¹". These factors are used for retirees, survivors, and spouses of retirees.

Gender-specific adjustment factors are used to account for changes in the gender distribution expected to occur over time. These adjustment factors are similar to mortality improvement factors. From FY 2000 through 2016, the percentage of females among all retirees increased from about 3% to about 7% for both officers and enlisted. As the percentage of female recruits increases, the military retiree population lives longer and retiree liabilities increase.

Active and reserve duty personnel mortality improvement factors are based on the SOA standard actuarial mortality projection table, "MP-2016." They are adjusted to reflect a 90%/10% male/female military population composition.

Based on comparisons with standard actuarial mortality improvement tables, post-retirement military-specific experience does not appear to mirror U.S. general population (based on FY 2000-2016 data). Military retirees tend to have higher improvement under age 75 and lower improvement over age 75 with comparison to MP-2016. In addition, military-specific MI experience exhibits noticeable differences within the various subgroups of military retirees. For instance, officers tend to have higher improvement than their enlisted counterparts.

Projecting future mortality trends presents a challenge due to fluctuations in the pattern of military-specific improvement over time. Emerging experience will be continually monitored and reflect advanced modeling techniques in the projection of mortality, finding a reasonable balance between past experience and future expectations.

To keep this report manageable and prevent unintentional misuse, the MI factors and gender adjustment factors are not shown for each year of the projection (through FY 2099 and beyond). They may be requested if needed.

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¹ For an in-depth discussion of MP-2016, see: https://www.soa.org/resources/experience-studies/2016/mortality-improvement-scale-mp-2016/

MORTALITY IMPROVEMENT FACTORS

<u>Applied to</u>: Active and Reserve Duty Personnel
<u>Gender Mix</u>: 90% Male / 10% Female

						Projection Year					
Age < 21	2013	2014	2015	2016	2017	2018	2019	2020 0.98224	2021	2022 0.98480	2023
< 21 21	0.96965 0.97139	0.97069 0.97223	0.97220 0.97354	0.97400 0.97513	0.97609 0.97700	0.97826 0.97888	0.98034 0.98075	0.98224	0.98375 0.98385	0.98480	0.98564 0.98564
22	0.97495	0.97395	0.97505	0.97635	0.97792	0.97949	0.98116	0.98264	0.98385	0.98480	0.98564
23	0.97867	0.97739	0.97655	0.97764	0.97891	0.98019	0.98156	0.98284	0.98395	0.98480	0.98564
24	0.98263	0.98098	0.97977	0.97892	0.97990	0.98097	0.98195	0.98304	0.98395	0.98480	0.98564
25	0.98655	0.98472	0.98314	0.98182	0.98087	0.98165	0.98244	0.98323	0.98405	0.98480	0.98564
26	0.99043	0.98843	0.98649	0.98479	0.98337	0.98233	0.98282	0.98343	0.98405	0.98480	0.98564
27	0.99418	0.99201	0.98979	0.98774	0.98585	0.98434	0.98321	0.98362	0.98415	0.98480	0.98564
28 29	0.99771 1.00075	0.99546 0.99860	0.99307 0.99604	0.99065 0.99336	0.98840 0.99083	0.98642 0.98849	0.98482 0.98652	0.98381 0.98513	0.98415 0.98424	0.98480 0.98480	0.98564 0.98564
30	1.00341	1.00127	0.99871	0.99594	0.99306	0.99044	0.98820	0.98644	0.98527	0.98480	0.98564
31	1.00540	1.00354	1.00100	0.99814	0.99517	0.99238	0.98977	0.98774	0.98638	0.98571	0.98564
32	1.00683	1.00516	1.00280	0.99996	0.99699	0.99402	0.99133	0.98911	0.98748	0.98663	0.98637
33	1.00741	1.00612	1.00395	1.00138	0.99852	0.99555	0.99277	0.99047	0.98866	0.98762	0.98717
34	1.00732	1.00632	1.00462	1.00224	0.99957	0.99679	0.99411	0.99172	0.98982	0.98861	0.98797
35 36	1.00638 1.00475	1.00585 1.00470	1.00453 1.00386	1.00262 1.00242	1.00023 1.00051	0.99774 0.99830	0.99516 0.99601	0.99278 0.99383	0.99089 0.99194	0.98958 0.99064	0.98886 0.98964
37	1.00244	1.00287	1.00261	1.00166	1.00031	0.99849	0.99658	0.99363	0.99289	0.99150	0.99051
38	0.99962	1.00045	1.00077	1.00049	0.99963	0.99838	0.99685	0.99524	0.99374	0.99236	0.99127
39	0.99658	0.99772	0.99853	0.99875	0.99856	0.99789	0.99685	0.99562	0.99431	0.99312	0.99203
40	0.99333	0.99477	0.99599	0.99679	0.99720	0.99711	0.99664	0.99580	0.99478	0.99369	0.99261
41	0.99015	0.99180	0.99333	0.99463	0.99554	0.99604	0.99606	0.99571	0.99507	0.99416	0.99317 0.99355
42 43	0.98726 0.98477	0.98893 0.98643	0.99066 0.98827	0.99237 0.99019	0.99377 0.99190	0.99477 0.99331	0.99529 0.99432	0.99541 0.99484	0.99507 0.99488	0.99445 0.99445	0.99375
44	0.98286	0.98433	0.98618	0.98812	0.99013	0.99184	0.99315	0.99407	0.99450	0.99436	0.99384
45	0.98157	0.98283	0.98449	0.98642	0.98845	0.99036	0.99198	0.99319	0.99392	0.99398	0.99366
46	0.98099	0.98194	0.98330	0.98513	0.98706	0.98908	0.99080	0.99222	0.99315	0.99350	0.99337
47	0.98112	0.98167	0.98281	0.98425	0.98607	0.98790	0.98962	0.99114	0.99227	0.99282	0.99298
48	0.98196	0.98210	0.98274	0.98387 0.98399	0.98538	0.98701	0.98863	0.99015	0.99129	0.99204	0.99240 0.99172
49 50	0.98333 0.98520	0.98306 0.98453	0.98328 0.98433	0.98463	0.98510 0.98523	0.98642 0.98614	0.98784 0.98725	0.98926 0.98847	0.99040 0.98951	0.99125 0.99046	0.99172
51	0.98738	0.98649	0.98588	0.98557	0.98575	0.98625	0.98695	0.98787	0.98881	0.98967	0.99034
52	0.98984	0.98865	0.98764	0.98692	0.98659	0.98657	0.98686	0.98747	0.98820	0.98897	0.98974
53	0.99247	0.99100	0.98968	0.98855	0.98772	0.98719	0.98707	0.98728	0.98771	0.98837	0.98914
54	0.99497	0.99341	0.99180	0.99037	0.98904	0.98811	0.98758	0.98729	0.98751	0.98797	0.98864
55	0.99740	0.99577	0.99399	0.99218	0.99055	0.98921	0.98819	0.98759	0.98742	0.98777	0.98825
56 57	0.99966 1.00146	0.99797 0.99982	0.99603 0.99792	0.99404 0.99577	0.99213 0.99360	0.99041 0.99161	0.98900 0.99000	0.98810 0.98872	0.98763 0.98794	0.98768 0.98779	0.98805 0.98805
58	1.00282	1.00141	0.99946	0.99727	0.99503	0.99287	0.99091	0.98943	0.98846	0.98810	0.98816
59	1.00364	1.00237	1.00067	0.99853	0.99625	0.99403	0.99199	0.99024	0.98908	0.98852	0.98837
60	1.00386	1.00291	1.00135	0.99937	0.99723	0.99497	0.99287	0.99113	0.98979	0.98904	0.98869
61	1.00342	1.00287	1.00163	0.99989	0.99790	0.99579	0.99373	0.99193	0.99051	0.98966	0.98920
62	1.00242	1.00217	1.00133	1.00001	0.99827	0.99639	0.99447	0.99271	0.99130	0.99027	0.98972
63 64	1.00090 0.99913	1.00101 0.99952	1.00057 0.99945	0.99965 0.99892	0.99833 0.99800	0.99669 0.99677	0.99500 0.99541	0.99337 0.99392	0.99199 0.99266	0.99097 0.99157	0.99023 0.99083
65	0.99704	0.99769	0.99799	0.99793	0.99740	0.99657	0.99552	0.99392	0.99321	0.99224	0.99133
66	0.99499	0.99581	0.99637	0.99668	0.99662	0.99617	0.99552	0.99465	0.99365	0.99270	0.99190
67	0.99299	0.99388	0.99470	0.99527	0.99557	0.99560	0.99524	0.99467	0.99397	0.99314	0.99227
68	0.99129	0.99216	0.99306	0.99380	0.99446	0.99476	0.99486	0.99458	0.99409	0.99337	0.99262
69	0.98990	0.99067	0.99155	0.99245	0.99328	0.99384	0.99422	0.99422 0.99377	0.99402	0.99350 0.99353	0.99286
70 71	0.98872 0.98792	0.98947 0.98848	0.99033 0.98933	0.99122 0.99020	0.99212 0.99108	0.99294 0.99198	0.99350 0.99270	0.99377	0.99376 0.99340	0.99337	0.99300 0.99295
72	0.98741	0.98786	0.98852	0.98928	0.99015	0.99103	0.99183	0.99254	0.99288	0.99303	0.99280
73	0.98709	0.98745	0.98800	0.98866	0.98942	0.99028	0.99116	0.99185	0.99228	0.99260	0.99256
74	0.98687	0.98722	0.98758	0.98823	0.98888	0.98964	0.99041	0.99118	0.99169	0.99210	0.99214
75	0.98693	0.98709	0.98745	0.98790	0.98854	0.98920	0.98986	0.99053	0.99111	0.99151	0.99173
76 77	0.98700 0.98715	0.98715 0.98721	0.98741 0.98746	0.98776 0.98771	0.98830 0.98815	0.98885 0.98860	0.98950 0.98915	0.99007 0.98970	0.99064 0.99017	0.99103 0.99056	0.99133 0.99086
78	0.98740	0.98746	0.98761	0.98785	0.98810	0.98854	0.98899	0.98944	0.98990	0.99019	0.99057
79	0.98765	0.98770	0.98776	0.98799	0.98823	0.98848	0.98883	0.98927	0.98964	0.98992	0.99021
80	0.98798	0.98794	0.98799	0.98813	0.98828	0.98861	0.98885	0.98911	0.98947	0.98974	0.99002
81	0.98839	0.98827	0.98832	0.98836	0.98850	0.98864	0.98888	0.98913	0.98939	0.98957	0.98985
82	0.98870	0.98867	0.98863	0.98868	0.98872	0.98886	0.98900	0.98915	0.98932	0.98958	0.98977
83 84	0.98909 0.98946	0.98897 0.98935	0.98894 0.98923	0.98889 0.98920	0.98894 0.98924	0.98898 0.98920	0.98912 0.98925	0.98918 0.98930	0.98934 0.98945	0.98951 0.98953	0.98969 0.98970
85	0.98974	0.98963	0.98952	0.98949	0.98945	0.98941	0.98946	0.98951	0.98957	0.98955	0.98972
86	0.99000	0.98991	0.98980	0.98978	0.98974	0.98971	0.98976	0.98972	0.98978	0.98976	0.98984
87	0.99017	0.99017	0.99007	0.99005	0.99003	0.99000	0.98997	0.99003	0.99000	0.99007	0.99005
88	0.99033	0.99034	0.99033	0.99024	0.99022	0.99029	0.99027	0.99024	0.99031	0.99028	0.99027
89 90	0.99040 0.99037	0.99041 0.99047	0.99041 0.99049	0.99041 0.99058	0.99050 0.99068	0.99049 0.99067	0.99047 0.99076	0.99054 0.99074	0.99052 0.99082	0.99059 0.99080	0.99057 0.99078
91	0.99025	0.99036	0.99056	0.99066	0.99076	0.99086	0.99095	0.99103	0.99102	0.99110	0.99109
92	0.98996	0.99025	0.99045	0.99065	0.99084	0.99104	0.99114	0.99123	0.99132	0.99140	0.99138
93	0.98966	0.98995	0.99024	0.99054	0.99083	0.99112	0.99132	0.99151	0.99160	0.99160	0.99168
94	0.98927	0.98965	0.99004	0.99043	0.99082	0.99112	0.99141	0.99170	0.99180	0.99189	0.99189
95 96	0.98879 0.98929	0.98918 0.98976	0.98975 0.99024	0.99024 0.99073	0.99072 0.99121	0.99111 0.99160	0.99150 0.99199	0.99180 0.99228	0.99208 0.99248	0.99218 0.99257	0.99218 0.99257
97	0.98987	0.99026	0.99074	0.99122	0.99161	0.99200	0.99239	0.99268	0.99287	0.99297	0.99297
98	0.99046	0.99085	0.99123	0.99171	0.99210	0.99249	0.99279	0.99308	0.99327	0.99337	0.99336
99	0.99105	0.99134	0.99173	0.99221	0.99259	0.99289	0.99318	0.99347	0.99367	0.99376	0.99376
100	0.99155	0.99193	0.99231	0.99270	0.99300	0.99338	0.99367	0.99387	0.99406	0.99416	0.99416
101	0.99213	0.99242	0.99281	0.99319	0.99349	0.99378	0.99407	0.99427	0.99446	0.99446	0.99455
102 103	0.99272 0.99322	0.99301 0.99351	0.99330 0.99380	0.99359 0.99409	0.99398 0.99438	0.99427 0.99467	0.99447 0.99496	0.99466 0.99506	0.99485 0.99525	0.99486 0.99525	0.99495 0.99534
104	0.99381	0.99409	0.99438	0.99458	0.99487	0.99516	0.99535	0.99555	0.99565	0.99565	0.99574
105	0.99439	0.99459	0.99488	0.99507	0.99536	0.99556	0.99575	0.99594	0.99604	0.99604	0.99613
106	0.99498	0.99517	0.99537	0.99557	0.99585	0.99605	0.99615	0.99634	0.99644	0.99644	0.99644
107	0.99548	0.99567	0.99586	0.99606	0.99625	0.99645	0.99664	0.99674	0.99683	0.99684	0.99684
108	0.99607	0.99626	0.99636	0.99655	0.99674	0.99694	0.99704	0.99713	0.99723	0.99723	0.99723
109 110	0.99665 0.99715	0.99675 0.99734	0.99694 0.99744	0.99704 0.99754	0.99723 0.99764	0.99733 0.99782	0.99743 0.99792	0.99753 0.99793	0.99762 0.99802	0.99763 0.99802	0.99763 0.99802
110	0.99774	0.99784	0.99744	0.99803	0.99813	0.99822	0.99832	0.99793	0.99842	0.99842	0.99842
112	0.99833	0.99842	0.99843	0.99852	0.99862	0.99871	0.99872	0.99881	0.99881	0.99881	0.99881
113	0.99891	0.99892	0.99901	0.99901	0.99911	0.99911	0.99911	0.99921	0.99921	0.99921	0.99921
114	0.99941	0.99950	0.99951	0.99951	0.99951	0.99960	0.99960	0.99960	0.99960	0.99960	0.99960
115	1.00000 1.00000	1.00000 1.00000	1.00000	1.00000	1.00000 1.00000	1.00000	1.00000 1.00000	1.00000 1.00000	1.00000 1.00000	1.00000 1.00000	1.00000
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to</u>: Active and Reserve Duty Personnel

<u>Gender Mix</u>: 90% Male / 10% Female

					Projection Year				
Age	2024	2025	2026	2027	2028	2029	2030	2031	2032+
< 21	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
21 22	0.98640	0.98707	0.98773	0.98839 0.98839	0.98896	0.98934 0.98934	0.98972 0.98972	0.98991 0.98991	0.99000
22 23	0.98640 0.98640	0.98707 0.98707	0.98773 0.98773	0.98839	0.98896 0.98896	0.98934	0.98972	0.98991	0.99000 0.99000
24	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
25	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
26	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
27	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
28	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
29 30	0.98640 0.98640	0.98707 0.98707	0.98773 0.98773	0.98839 0.98839	0.98896 0.98896	0.98934 0.98934	0.98972 0.98972	0.98991 0.98991	0.99000 0.99000
31	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
32	0.98640	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
33	0.98702	0.98707	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
34	0.98763	0.98758	0.98773	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
35	0.98833	0.98809	0.98814	0.98839	0.98896	0.98934	0.98972	0.98991	0.99000
36 37	0.98902 0.98970	0.98868 0.98927	0.98854 0.98894	0.98869 0.98891	0.98896 0.98907	0.98934 0.98934	0.98972 0.98972	0.98991 0.98991	0.99000 0.99000
38	0.99047	0.98976	0.98943	0.98930	0.98927	0.98944	0.98972	0.98991	0.99000
39	0.99105	0.99034	0.98982	0.98959	0.98947	0.98963	0.98972	0.98991	0.99000
40	0.99171	0.99091	0.99030	0.98989	0.98976	0.98974	0.98982	0.98991	0.99000
41	0.99219	0.99138	0.99068	0.99018	0.98995	0.98984	0.98982	0.98991	0.99000
42	0.99266 0.99294	0.99177 0.99205	0.99106 0.99135	0.99046 0.99075	0.99015 0.99034	0.98994 0.99003	0.98992 0.99001	0.99000 0.99000	0.99000 0.99000
43 44	0.99313	0.99205	0.99163	0.99075	0.99053	0.99022	0.99001	0.99000	0.99000
45	0.99314	0.99253	0.99182	0.99113	0.99063	0.99032	0.99011	0.99000	0.99000
46	0.99304	0.99253	0.99192	0.99132	0.99081	0.99041	0.99011	0.99000	0.99000
47	0.99285	0.99244	0.99192	0.99141	0.99091	0.99041	0.99020	0.99001	0.99000
48	0.99247	0.99225	0.99183	0.99141	0.99091	0.99051	0.99021	0.99001	0.99000
49 50	0.99199 0.99149	0.99196 0.99157	0.99173 0.99154	0.99132 0.99123	0.99091 0.99091	0.99051 0.99051	0.99021 0.99021	0.99010 0.99010	0.99000 0.99000
51	0.99091	0.99118	0.99125	0.99113	0.99082	0.99051	0.99021	0.99010	0.99000
52	0.99031	0.99069	0.99086	0.99084	0.99072	0.99051	0.99021	0.99010	0.99000
53	0.98972	0.99020	0.99056	0.99064	0.99062	0.99041	0.99021	0.99010	0.99000
54	0.98922	0.98980	0.99017	0.99035	0.99043	0.99032	0.99020	0.99010	0.99000
55	0.98882 0.98861	0.98940 0.98909	0.98987 0.98957	0.99015 0.98986	0.99024 0.99013	0.99022 0.99012	0.99020 0.99011	0.99001 0.99001	0.99000 0.99000
56 57	0.98842	0.98889	0.98928	0.98965	0.98993	0.99012	0.99011	0.99001	0.99000
58	0.98833	0.98870	0.98917	0.98946	0.98974	0.98992	0.99001	0.99000	0.99000
59	0.98843	0.98870	0.98907	0.98935	0.98964	0.98992	0.99001	0.99000	0.99000
60	0.98864	0.98880	0.98898	0.98926	0.98954	0.98982	0.98991	0.99000	0.99000
61	0.98895	0.98891	0.98908	0.98926	0.98953	0.98972	0.98991	0.99000	0.99000
62 63	0.98936 0.98978	0.98913 0.98944	0.98919 0.98939	0.98935 0.98937	0.98953 0.98954	0.98972 0.98972	0.98991 0.98991	0.99000 0.99000	0.99000 0.99000
64	0.99019	0.98984	0.98960	0.98957	0.98964	0.98972	0.98991	0.99000	0.99000
65	0.99069	0.99015	0.98982	0.98968	0.98965	0.98973	0.98991	0.99000	0.99000
66	0.99109	0.99055	0.99012	0.98988	0.98975	0.98983	0.98991	0.99000	0.99000
67	0.99157	0.99094	0.99042	0.99009	0.98995	0.98992	0.98991	0.99000	0.99000
68 69	0.99194 0.99220	0.99124 0.99151	0.99071 0.99091	0.99029 0.99048	0.99006 0.99016	0.98993 0.99003	0.98992 0.99001	0.99000 0.99000	0.99000 0.99000
70	0.99235	0.99178	0.99118	0.99068	0.99035	0.99013	0.99002	0.99000	0.99000
71	0.99250	0.99194	0.99136	0.99086	0.99045	0.99023	0.99002	0.99000	0.99000
72	0.99245	0.99200	0.99143	0.99095	0.99054	0.99023	0.99011	0.99000	0.99000
73	0.99231	0.99196	0.99150	0.99103	0.99063	0.99032	0.99011	0.99001	0.99000
74	0.99208	0.99183	0.99147	0.99110	0.99071	0.99041	0.99012	0.99001	0.99000
75 76	0.99177 0.99146	0.99170 0.99149	0.99144 0.99132	0.99108 0.99106	0.99070 0.99069	0.99041 0.99040	0.99020 0.99020	0.99001 0.99001	0.99000 0.99000
77	0.99107	0.99119	0.99112	0.99095	0.99068	0.99040	0.99020	0.99001	0.99000
78	0.99078	0.99089	0.99091	0.99084	0.99066	0.99039	0.99020	0.99010	0.99000
79	0.99050	0.99061	0.99062	0.99064	0.99056	0.99038	0.99019	0.99009	0.99000
80	0.99022	0.99042	0.99052	0.99044	0.99046	0.99028	0.99019	0.99009	0.99000
81 82	0.99004 0.98996	0.99023 0.99015	0.99034 0.99025	0.99035 0.99026	0.99036 0.99027	0.99027 0.99018	0.99018 0.99009	0.99000 0.99000	0.99000 0.99000
83	0.98987	0.99006	0.99025	0.99026	0.99027	0.99018	0.99009	0.99000	0.99000
84	0.98980	0.98998	0.99008	0.99017	0.99027	0.99018	0.99009	0.99000	0.99000
85	0.98981	0.98999	0.99009	0.99018	0.99019	0.99019	0.99019	0.99010	0.99000
86	0.98992	0.99010	0.99019	0.99029	0.99029	0.99029	0.99029	0.99020	0.99010
87 88	0.99013 0.99034	0.99021 0.99032	0.99030 0.99041	0.99039 0.99050	0.99040 0.99050	0.99049 0.99059	0.99040 0.99059	0.99040 0.99050	0.99030 0.99040
88 89	0.99034	0.99032	0.99041	0.99050	0.99050	0.99059	0.99059	0.99050	0.99040
90	0.99086	0.99084	0.99082	0.99072	0.99081	0.99081	0.99080	0.99080	0.99070
91	0.99107	0.99105	0.99103	0.99102	0.99091	0.99100	0.99100	0.99100	0.99090
92	0.99137	0.99135	0.99134	0.99132	0.99121	0.99111	0.99110	0.99110	0.99100
93	0.99167	0.99165	0.99164	0.99153	0.99151	0.99141	0.99130	0.99130	0.99120
94 95	0.99197 0.99217	0.99195 0.99216	0.99194 0.99215	0.99183 0.99213	0.99181 0.99202	0.99171 0.99201	0.99160 0.99181	0.99140 0.99170	0.99130 0.99150
96	0.99257	0.99256	0.99254	0.99253	0.99242	0.99241	0.99230	0.99210	0.99190
97	0.99296	0.99295	0.99294	0.99293	0.99282	0.99281	0.99270	0.99250	0.99230
98	0.99336	0.99335	0.99334	0.99332	0.99322	0.99321	0.99310	0.99290	0.99280
99	0.99376	0.99375	0.99374	0.99372	0.99362	0.99361	0.99350	0.99340	0.99320
100 101	0.99415 0.99455	0.99414 0.99454	0.99413	0.99412 0.99452	0.99402 0.99442	0.99401	0.99390 0.99430	0.99380 0.99420	0.99360
101	0.99494	0.99494	0.99453 0.99493	0.99452	0.99442	0.99440 0.99480	0.99470	0.99460	0.99400 0.99450
103	0.99534	0.99533	0.99532	0.99531	0.99521	0.99520	0.99510	0.99500	0.99490
104	0.99573	0.99573	0.99572	0.99571	0.99561	0.99560	0.99550	0.99540	0.99530
105	0.99613	0.99613	0.99612	0.99611	0.99601	0.99600	0.99590	0.99581	0.99570
106	0.99653	0.99652	0.99652	0.99642	0.99641	0.99640	0.99631	0.99630	0.99620
107 108	0.99692 0.99723	0.99692 0.99722	0.99691 0.99722	0.99682 0.99721	0.99681 0.99721	0.99680 0.99720	0.99671 0.99711	0.99670 0.99710	0.99660 0.99700
108	0.99762	0.99762	0.99762	0.99761	0.99761	0.99760	0.99760	0.99750	0.99740
110	0.99802	0.99802	0.99801	0.99801	0.99801	0.99800	0.99800	0.99790	0.99790
111	0.99842	0.99841	0.99841	0.99841	0.99840	0.99840	0.99840	0.99830	0.99830
112	0.99881	0.99881	0.99881	0.99881	0.99880	0.99880	0.99880	0.99880	0.99870
113 114	0.99921 0.99960	0.99921 0.99960	0.99921 0.99960	0.99920 0.99960	0.99920 0.99960	0.99920 0.99960	0.99920 0.99960	0.99920 0.99960	0.99910 0.99960
114	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS

<u>Applied to</u>: Nondisability Retirees from Active Duty -- Officer [Factors only shown through 2034.] Gender Mix: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2013	2014	2015	2016	2017 0.99383	2018 0.99178	2019 0.99133	2020 0.99087	2021 0.99038	2022 0.98992	2023
< 21 21	0.98930 0.98930	0.99445 0.99445	0.99437 0.99437	0.99416 0.99416	0.99383	0.99178 0.99179	0.99133	0.99087	0.99038	0.98992	0.98955 0.98956
22	0.98930	0.99445	0.99437	0.99416	0.99383	0.99180	0.99136	0.99090	0.99040	0.98995	0.98957
23	0.98930	0.99445	0.99437	0.99416	0.99383	0.99182	0.99138	0.99092	0.99042	0.98997	0.98959
24	0.98930	0.99445	0.99437	0.99416	0.99383	0.99185	0.99140	0.99094	0.99045	0.99000	0.98962
25	0.98930	0.99445	0.99437	0.99416	0.99383	0.99188	0.99144	0.99098	0.99048	0.99003	0.98966
26	0.98930	0.99445	0.99437	0.99416	0.99383	0.99191	0.99147	0.99101	0.99051	0.99006	0.98969
27	0.98930	0.99445	0.99437	0.99416	0.99383	0.99195	0.99150	0.99104	0.99055	0.99010	0.98973
28 29	0.98930 0.98930	0.99445 0.99445	0.99437 0.99437	0.99416 0.99416	0.99383 0.99383	0.99199 0.99201	0.99154 0.99156	0.99108 0.99110	0.99059 0.99061	0.99014 0.99016	0.98977 0.98980
30	0.98930	0.99445	0.99437	0.99416	0.99383	0.99201	0.99157	0.99111	0.99062	0.99017	0.98980
31	0.98930	0.99445	0.99437	0.99416	0.99383	0.99200	0.99156	0.99110	0.99061	0.99016	0.98979
32	0.98930	0.99445	0.99437	0.99416	0.99383	0.99199	0.99154	0.99108	0.99059	0.99014	0.98978
33	0.98930	0.99445	0.99437	0.99416	0.99383	0.99198	0.99153	0.99107	0.99058	0.99013	0.98976
34	0.98930	0.99445	0.99437	0.99416	0.99383	0.99199	0.99155	0.99109	0.99060	0.99015	0.98978
35	0.98930	0.99445	0.99437	0.99416 0.99416	0.99383	0.99201	0.99157	0.99110 0.99113	0.99062	0.99017	0.98980 0.98983
36 37	0.98930 0.98930	0.99445 0.99445	0.99437 0.99437	0.99416	0.99383 0.99383	0.99204 0.99207	0.99159 0.99163	0.99117	0.99064 0.99068	0.99020 0.99023	0.98987
38	0.98930	0.99445	0.99437	0.99416	0.99383	0.99211	0.99166	0.99120	0.99072	0.99027	0.98990
39	0.98930	0.99445	0.99437	0.99416	0.99383	0.99214	0.99169	0.99123	0.99075	0.99030	0.98994
40	0.98930	0.99445	0.99437	0.99416	0.99383	0.99219	0.99175	0.99129	0.99080	0.99036	0.99000
41	0.98930	0.99445	0.99437	0.99416	0.99383	0.99226	0.99181	0.99135	0.99087	0.99043	0.99006
42	0.98930	0.99445	0.99437	0.99416	0.99383	0.99237	0.99192	0.99146	0.99098	0.99055	0.99019
43 44	0.98930 0.98930	0.99445 0.99445	0.99437 0.99437	0.99416 0.99416	0.99383 0.99383	0.99254 0.99270	0.99210 0.99226	0.99164 0.99179	0.99116 0.99132	0.99073 0.99090	0.99038 0.99055
45	0.98930	0.99445	0.99437	0.99416	0.99383	0.99284	0.99240	0.99179	0.99147	0.99105	0.99070
46	0.98930	0.99445	0.99437	0.99416	0.99383	0.99299	0.99254	0.99208	0.99162	0.99120	0.99086
47	0.98930	0.99445	0.99437	0.99416	0.99383	0.99308	0.99264	0.99217	0.99172	0.99130	0.99096
48	0.98930	0.99445	0.99437	0.99416	0.99383	0.99311	0.99266	0.99220	0.99174	0.99133	0.99099
49	0.98930	0.99445	0.99437	0.99416	0.99383	0.99314	0.99269	0.99223	0.99177	0.99136	0.99102
50	0.98930	0.99445	0.99437	0.99416	0.99383	0.99318	0.99273	0.99227	0.99182	0.99140	0.99106
51 52	0.98606 0.98277	0.98963 0.98428	0.98964 0.98438	0.99200 0.98726	0.99195 0.98985	0.99165 0.98992	0.99156 0.99023	0.99145 0.99052	0.99132 0.99075	0.99118 0.99091	0.99103 0.99096
52 53	0.98277	0.98428	0.98438	0.98238	0.98559	0.98992	0.98894	0.99052	0.99075	0.99091	0.99096
54	0.97559	0.97383	0.97411	0.97750	0.98097	0.98433	0.98756	0.98863	0.98957	0.99031	0.99076
55	0.97169	0.96842	0.96880	0.97247	0.97647	0.98011	0.98412	0.98762	0.98893	0.98997	0.99062
56	0.96793	0.96375	0.96422	0.96775	0.97212	0.97626	0.98062	0.98484	0.98835	0.98965	0.99047
57	0.96480	0.96034	0.96086	0.96396	0.96824	0.97268	0.97756	0.98206	0.98618	0.98940	0.99035
58	0.96248	0.95840	0.95896	0.96143	0.96529	0.96957	0.97475	0.97968	0.98399	0.98768	0.99026
59 60	0.96066 0.95891	0.95724 0.95645	0.95782 0.95704	0.95997 0.95905	0.96323 0.96201	0.96707 0.96525	0.97214 0.96995	0.97733 0.97504	0.98200 0.97996	0.98584 0.98412	0.98882 0.98724
61	0.95779	0.95623	0.95682	0.95856	0.96138	0.96430	0.96844	0.97316	0.97797	0.98235	0.98575
62	0.95750	0.95678	0.95736	0.95870	0.96122	0.96394	0.96774	0.97190	0.97634	0.98061	0.98420
63	0.95764	0.95775	0.95832	0.95941	0.96150	0.96388	0.96748	0.97129	0.97520	0.97913	0.98264
64	0.95773	0.95906	0.95961	0.96047	0.96227	0.96420	0.96746	0.97106	0.97464	0.97808	0.98131
65	0.95811	0.96043	0.96095	0.96172	0.96326	0.96489	0.96771	0.97099	0.97437	0.97753	0.98035
66 67	0.95888 0.96017	0.96207 0.96397	0.96257 0.96443	0.96312 0.96477	0.96453 0.96591	0.96587 0.96710	0.96837 0.96928	0.97121 0.97179	0.97428 0.97443	0.97725 0.97713	0.97983
68	0.96190	0.96617	0.96659	0.96668	0.96755	0.96847	0.97043	0.97260	0.97492	0.97722	0.97956 0.97941
69	0.96414	0.96832	0.96871	0.96871	0.96929	0.96996	0.97159	0.97355	0.97555	0.97756	0.97943
70	0.96659	0.97043	0.97078	0.97071	0.97115	0.97155	0.97288	0.97450	0.97630	0.97804	0.97968
71	0.96906	0.97241	0.97272	0.97262	0.97294	0.97323	0.97423	0.97556	0.97705	0.97862	0.98003
72	0.97156	0.97426	0.97454	0.97441	0.97466	0.97485	0.97567	0.97669	0.97791	0.97921	0.98049
73	0.97378	0.97587	0.97613	0.97604	0.97623	0.97637	0.97704	0.97789	0.97883	0.97990	0.98095
74 75	0.97570	0.97745 0.97890	0.97767 0.97910	0.97753 0.97894	0.97772 0.97905	0.97781 0.97916	0.97838 0.97963	0.97907 0.98021	0.97985 0.98085	0.98066 0.98152	0.98152 0.98216
76	0.97737 0.97889	0.98019	0.98037	0.98023	0.98030	0.98035	0.98078	0.98127	0.98181	0.98235	0.98288
77	0.98034	0.98130	0.98146	0.98136	0.98142	0.98145	0.98179	0.98224	0.98269	0.98315	0.98359
78	0.98170	0.98237	0.98252	0.98239	0.98246	0.98248	0.98275	0.98310	0.98352	0.98390	0.98427
79	0.98301	0.98344	0.98356	0.98339	0.98341	0.98345	0.98366	0.98394	0.98426	0.98461	0.98491
80	0.98423	0.98457	0.98468	0.98442	0.98437	0.98436	0.98454	0.98474	0.98498	0.98524	0.98551
81 82	0.98549 0.98672	0.98573 0.98690	0.98582 0.98697	0.98550 0.98659	0.98534 0.98635	0.98525 0.98614	0.98535 0.98615	0.98552 0.98622	0.98567 0.98633	0.98585 0.98642	0.98603 0.98655
83	0.98783	0.98810	0.98815	0.98771	0.98737	0.98707	0.98694	0.98691	0.98693	0.98699	0.98703
84	0.98882	0.98920	0.98923	0.98879	0.98837	0.98798	0.98773	0.98757	0.98750	0.98749	0.98752
85	0.98977	0.99019	0.99021	0.98977	0.98933	0.98885	0.98850	0.98824	0.98805	0.98797	0.98794
86	0.99073	0.99115	0.99115	0.99069	0.99025	0.98973	0.98930	0.98895	0.98867	0.98849	0.98841
87	0.99167	0.99202	0.99201	0.99156	0.99109	0.99054	0.99007	0.98964	0.98928	0.98903	0.98888
88 89	0.99257 0.99339	0.99282 0.99353	0.99280 0.99351	0.99236 0.99308	0.99188 0.99260	0.99126 0.99194	0.99078 0.99142	0.99031 0.99093	0.98988 0.99047	0.98956 0.99008	0.98935 0.98982
90	0.99416	0.99415	0.99412	0.99372	0.99325	0.99254	0.99201	0.99093	0.99102	0.99061	0.99029
91	0.99488	0.99472	0.99468	0.99429	0.99383	0.99310	0.99255	0.99202	0.99152	0.99110	0.99076
92	0.99556	0.99523	0.99519	0.99481	0.99435	0.99360	0.99306	0.99251	0.99200	0.99155	0.99121
93	0.99619	0.99568	0.99563	0.99527	0.99482	0.99403	0.99351	0.99297	0.99244	0.99199	0.99163
94 95	0.99680 0.99742	0.99608 0.99645	0.99602 0.99640	0.99568 0.99606	0.99525 0.99564	0.99444 0.99481	0.99391 0.99429	0.99338 0.99376	0.99286 0.99325	0.99240 0.99280	0.99204 0.99243
96	0.99802	0.99682	0.99676	0.99643	0.99603	0.99520	0.99429	0.99421	0.99372	0.99329	0.99294
97	0.99862	0.99718	0.99712	0.99679	0.99640	0.99557	0.99511	0.99463	0.99417	0.99375	0.99343
98	0.99921	0.99752	0.99746	0.99714	0.99675	0.99593	0.99548	0.99503	0.99459	0.99420	0.99389
99	0.99981	0.99787	0.99781	0.99749	0.99710	0.99627	0.99585	0.99542	0.99500	0.99463	0.99433
100	1.00040	0.99821	0.99816	0.99783	0.99745	0.99660	0.99618	0.99580	0.99539	0.99504	0.99477
101	1.00038	0.99833	0.99828	0.99808	0.99770	0.99685	0.99646	0.99608	0.99575	0.99543	0.99518
102 103	1.00035 1.00032	0.99845 0.99857	0.99840 0.99852	0.99821 0.99834	0.99796 0.99811	0.99711 0.99739	0.99673 0.99701	0.99637 0.99667	0.99605 0.99637	0.99581 0.99613	0.99558 0.99599
103	1.00032	0.99869	0.99865	0.99848	0.99825	0.99756	0.99731	0.99698	0.99668	0.99645	0.99632
105	1.00027	0.99881	0.99877	0.99861	0.99840	0.99774	0.99750	0.99728	0.99700	0.99678	0.99664
106	1.00024	0.99893	0.99889	0.99874	0.99855	0.99792	0.99771	0.99750	0.99731	0.99710	0.99696
107	1.00022	0.99905	0.99902	0.99888	0.99870	0.99811	0.99791	0.99772	0.99755	0.99743	0.99729
108	1.00019	0.99917	0.99914	0.99901	0.99885	0.99827	0.99809	0.99793	0.99778	0.99766	0.99760
109	1.00016	0.99929	0.99926	0.99914	0.99900 0.99915	0.99844	0.99828	0.99813	0.99800	0.99790	0.99784
110 111	1.00013 1.00011	0.99940 0.99952	0.99939 0.99951	0.99928 0.99941	0.99915	0.99861 0.99917	0.99847 0.99905	0.99834 0.99895	0.99822 0.99885	0.99813 0.99879	0.99808 0.99876
111	1.00011	0.99964	0.99963	0.99941	0.99944	0.99934	0.99905	0.99915	0.99908	0.99979	0.99900
113	1.00005	0.99976	0.99975	0.99968	0.99959	0.99951	0.99943	0.99936	0.99930	0.99926	0.99924
114	1.00003	0.99988	0.99988	0.99981	0.99974	0.99967	0.99961	0.99956	0.99952	0.99949	0.99948
115	1.00000	1.00000	1.00000	0.99994	0.99989	0.99984	0.99980	0.99977	0.99974	0.99973	0.99973
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to:</u> Nondisability Retirees from Active Duty -- Officer [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
< 21 21	0.98928 0.98929	0.98908 0.98909	0.98889 0.98890	0.98871 0.98872	0.98853 0.98854	0.98835 0.98836	0.98818 0.98819	0.98802 0.98803	0.98789 0.98790	0.98780 0.98781	0.98774 0.98775
22	0.98931	0.98910	0.98891	0.98874	0.98856	0.98838	0.98821	0.98805	0.98792	0.98783	0.98777
23	0.98933	0.98913	0.98894	0.98876	0.98858	0.98841	0.98824	0.98808	0.98795	0.98786	0.98780
24	0.98936	0.98916	0.98897	0.98879	0.98861	0.98844	0.98827	0.98811	0.98799	0.98789	0.98784
25	0.98939	0.98919	0.98900	0.98883	0.98865	0.98848	0.98831	0.98816	0.98803	0.98794	0.98788
26 27	0.98943 0.98946	0.98923 0.98927	0.98904 0.98908	0.98886 0.98890	0.98869 0.98873	0.98852 0.98856	0.98835 0.98839	0.98820 0.98824	0.98807 0.98811	0.98798 0.98803	0.98793 0.98797
28	0.98951	0.98931	0.98912	0.98895	0.98877	0.98860	0.98844	0.98829	0.98817	0.98808	0.98803
29	0.98953	0.98934	0.98915	0.98898	0.98880	0.98863	0.98847	0.98832	0.98820	0.98811	0.98806
30	0.98954	0.98934	0.98916	0.98898	0.98881	0.98864	0.98847	0.98833	0.98820	0.98812	0.98807
31	0.98953	0.98933	0.98915	0.98897	0.98880	0.98863	0.98846	0.98831	0.98819	0.98810	0.98805
32	0.98951	0.98932	0.98913	0.98896	0.98878	0.98861	0.98845	0.98830	0.98817	0.98808	0.98803
33 34	0.98950 0.98952	0.98930 0.98932	0.98912 0.98913	0.98894 0.98896	0.98877 0.98878	0.98860 0.98861	0.98843 0.98845	0.98828 0.98830	0.98816 0.98818	0.98807 0.98809	0.98802 0.98804
35	0.98954	0.98934	0.98915	0.98898	0.98881	0.98864	0.98847	0.98832	0.98820	0.98811	0.98806
36	0.98957	0.98937	0.98918	0.98901	0.98884	0.98867	0.98851	0.98836	0.98824	0.98815	0.98810
37	0.98961	0.98941	0.98923	0.98905	0.98888	0.98871	0.98855	0.98841	0.98828	0.98820	0.98815
38	0.98964	0.98945	0.98927	0.98909	0.98892	0.98875	0.98859	0.98845	0.98833	0.98825	0.98820
39	0.98968 0.98974	0.98949 0.98955	0.98930 0.98936	0.98913 0.98919	0.98896 0.98902	0.98879 0.98886	0.98863 0.98870	0.98849 0.98856	0.98837 0.98844	0.98829 0.98836	0.98824 0.98832
40 41	0.98981	0.98962	0.98944	0.98927	0.98910	0.98893	0.98878	0.98864	0.98853	0.98845	0.98840
42	0.98993	0.98975	0.98956	0.98940	0.98923	0.98907	0.98892	0.98878	0.98867	0.98860	0.98856
43	0.99013	0.98994	0.98976	0.98960	0.98943	0.98928	0.98913	0.98901	0.98890	0.98883	0.98880
44	0.99030	0.99012	0.98995	0.98978	0.98962	0.98947	0.98933	0.98921	0.98911	0.98904	0.98901
45	0.99046	0.99028	0.99011	0.98995	0.98979	0.98964	0.98951	0.98939	0.98930	0.98924	0.98921
46 47	0.99062 0.99072	0.99045 0.99055	0.99028 0.99038	0.99012 0.99022	0.98996 0.99007	0.98982 0.98993	0.98969 0.98980	0.98958 0.98969	0.98949 0.98961	0.98943 0.98955	0.98940 0.98953
48	0.99072	0.99058	0.99041	0.99025	0.99010	0.98996	0.98983	0.98972	0.98964	0.98958	0.98956
49	0.99079	0.99061	0.99045	0.99029	0.99014	0.99000	0.98987	0.98976	0.98968	0.98963	0.98961
50	0.99083	0.99066	0.99049	0.99033	0.99018	0.99004	0.98992	0.98981	0.98973	0.98968	0.98966
51	0.99086	0.99069	0.99052	0.99036	0.99021	0.99007	0.98995	0.98985	0.98977	0.98971	0.98969
52	0.99087	0.99070	0.99053	0.99037	0.99022	0.99008	0.98996	0.98986	0.98978	0.98973	0.98971
53 54	0.99085 0.99081	0.99068 0.99064	0.99052 0.99047	0.99036 0.99031	0.99021 0.99016	0.99007 0.99002	0.98995 0.98990	0.98984 0.98979	0.98976 0.98971	0.98971 0.98966	0.98969 0.98964
55	0.99075	0.99057	0.99041	0.99025	0.99009	0.98995	0.98983	0.98972	0.98963	0.98958	0.98956
56	0.99067	0.99049	0.99032	0.99016	0.99001	0.98987	0.98974	0.98963	0.98954	0.98948	0.98946
57	0.99059	0.99041	0.99024	0.99008	0.98993	0.98978	0.98965	0.98954	0.98945	0.98939	0.98936
58	0.99052	0.99035	0.99017	0.99001	0.98986	0.98971	0.98958	0.98946	0.98937	0.98931	0.98928
59 60	0.99048 0.98924	0.99030 0.99027	0.99013 0.99010	0.98997 0.98993	0.98981 0.98978	0.98966 0.98963	0.98953 0.98949	0.98941 0.98938	0.98932 0.98928	0.98926 0.98922	0.98923 0.98919
61	0.98788	0.98922	0.99007	0.98991	0.98975	0.98960	0.98947	0.98935	0.98926	0.98919	0.98919
62	0.98660	0.98806	0.98921	0.98989	0.98973	0.98958	0.98945	0.98933	0.98923	0.98917	0.98914
63	0.98524	0.98697	0.98825	0.98919	0.98971	0.98956	0.98943	0.98931	0.98921	0.98915	0.98912
64	0.98387	0.98581	0.98734	0.98843	0.98918	0.98955	0.98941	0.98929	0.98920	0.98913	0.98910
65	0.98271	0.98466	0.98640	0.98771	0.98860	0.98917	0.98941	0.98929	0.98920	0.98913	0.98910
66 67	0.98187 0.98142	0.98369 0.98300	0.98546 0.98468	0.98697 0.98625	0.98807 0.98753	0.98877 0.98842	0.98918 0.98894	0.98931 0.98921	0.98922 0.98926	0.98915 0.98920	0.98912 0.98917
68	0.98118	0.98264	0.98413	0.98565	0.98700	0.98805	0.98874	0.98910	0.98925	0.98926	0.98923
69	0.98104	0.98245	0.98385	0.98522	0.98656	0.98769	0.98852	0.98901	0.98924	0.98931	0.98930
70	0.98104	0.98234	0.98370	0.98501	0.98625	0.98739	0.98830	0.98892	0.98924	0.98936	0.98937
71	0.98123	0.98235	0.98362	0.98490	0.98610	0.98718	0.98812	0.98881	0.98923	0.98940	0.98943
72 73	0.98152 0.98190	0.98252 0.98277	0.98363 0.98378	0.98484 0.98486	0.98602 0.98599	0.98708 0.98704	0.98800 0.98795	0.98873 0.98868	0.98921 0.98920	0.98944 0.98948	0.98949 0.98955
74	0.98229	0.98310	0.98400	0.98499	0.98601	0.98703	0.98794	0.98868	0.98921	0.98952	0.98961
75	0.98278	0.98343	0.98427	0.98517	0.98612	0.98707	0.98795	0.98869	0.98924	0.98957	0.98967
76	0.98334	0.98387	0.98456	0.98540	0.98627	0.98716	0.98799	0.98872	0.98927	0.98961	0.98972
77	0.98396	0.98435	0.98493	0.98563	0.98645	0.98727	0.98806	0.98875	0.98930	0.98965	0.98976
78	0.98457	0.98489	0.98535	0.98595	0.98663	0.98741	0.98814	0.98880	0.98933	0.98968	0.98980
79 80	0.98515 0.98571	0.98542 0.98593	0.98581 0.98625	0.98629 0.98668	0.98689 0.98718	0.98754 0.98775	0.98823 0.98833	0.98886 0.98892	0.98937 0.98941	0.98971 0.98973	0.98983 0.98985
81	0.98622	0.98641	0.98669	0.98705	0.98749	0.98798	0.98850	0.98898	0.98945	0.98976	0.98987
82	0.98668	0.98687	0.98711	0.98742	0.98780	0.98823	0.98868	0.98912	0.98948	0.98978	0.98989
83	0.98713	0.98727	0.98749	0.98777	0.98810	0.98848	0.98888	0.98927	0.98960	0.98981	0.98991
84	0.98754	0.98765	0.98784	0.98809	0.98838	0.98872	0.98907	0.98941	0.98971	0.98990	0.98992
85	0.98797	0.98801	0.98816	0.98837	0.98864	0.98894	0.98925	0.98955	0.98981	0.98998	0.99000
86 87	0.98841 0.98884	0.98847 0.98888	0.98853 0.98895	0.98871 0.98903	0.98894 0.98922	0.98921 0.98945	0.98948 0.98970	0.98975 0.98993	0.98998 0.99013	0.99012 0.99026	0.99014 0.99026
88	0.98926	0.98927	0.98933	0.98941	0.98948	0.98968	0.98989	0.99010	0.99027	0.99038	0.99037
89	0.98969	0.98966	0.98969	0.98975	0.98983	0.98989	0.99007	0.99025	0.99040	0.99049	0.99048
90	0.99012	0.99006	0.99005	0.99009	0.99015	0.99020	0.99025	0.99040	0.99053	0.99060	0.99058
91	0.99055	0.99046	0.99042	0.99042	0.99046	0.99050	0.99054	0.99054	0.99065	0.99071	0.99068
92 93	0.99100 0.99142	0.99087 0.99128	0.99080 0.99118	0.99077 0.99112	0.99077 0.99110	0.99080 0.99110	0.99082 0.99110	0.99081 0.99108	0.99077 0.99103	0.99082 0.99093	0.99079 0.99089
94	0.99181	0.99168	0.99157	0.99148	0.99143	0.99140	0.99138	0.99135	0.99129	0.99118	0.99100
95	0.99220	0.99206	0.99195	0.99185	0.99177	0.99172	0.99167	0.99162	0.99155	0.99144	0.99126
96	0.99271	0.99257	0.99244	0.99234	0.99225	0.99217	0.99211	0.99204	0.99196	0.99183	0.99165
97	0.99321	0.99307	0.99294	0.99282	0.99273	0.99263	0.99255	0.99246	0.99236	0.99223	0.99205
98 99	0.99369	0.99355	0.99342	0.99330	0.99319	0.99309	0.99299	0.99289	0.99278	0.99264	0.99245
100	0.99414 0.99459	0.99402 0.99447	0.99390 0.99435	0.99377 0.99423	0.99365 0.99411	0.99354 0.99399	0.99343 0.99387	0.99332 0.99374	0.99319 0.99361	0.99304 0.99345	0.99285 0.99326
101	0.99502	0.99491	0.99480	0.99468	0.99456	0.99443	0.99430	0.99417	0.99402	0.99386	0.99366
102	0.99544	0.99534	0.99523	0.99512	0.99500	0.99487	0.99474	0.99459	0.99444	0.99427	0.99407
103	0.99586	0.99578	0.99568	0.99557	0.99546	0.99533	0.99519	0.99504	0.99488	0.99471	0.99451
104	0.99629	0.99621	0.99612	0.99602	0.99591	0.99578	0.99564	0.99549	0.99533	0.99515	0.99494
105 106	0.99660 0.99692	0.99664 0.99694	0.99656 0.99699	0.99646 0.99690	0.99636 0.99680	0.99623 0.99668	0.99609 0.99654	0.99594 0.99639	0.99577 0.99622	0.99559 0.99603	0.99538 0.99583
107	0.99724	0.99725	0.99728	0.99734	0.99724	0.99713	0.99699	0.99639	0.99622	0.99648	0.99628
108	0.99754	0.99754	0.99756	0.99760	0.99766	0.99755	0.99742	0.99726	0.99710	0.99691	0.99670
109	0.99784	0.99782	0.99783	0.99787	0.99791	0.99797	0.99784	0.99769	0.99752	0.99733	0.99713
110	0.99808	0.99811	0.99811	0.99813	0.99816	0.99821	0.99826	0.99811	0.99795	0.99776	0.99755
111	0.99876	0.99880	0.99884	0.99885	0.99888	0.99893	0.99898	0.99904	0.99889	0.99871	0.99851
112 113	0.99901 0.99925	0.99903 0.99927	0.99907 0.99930	0.99911 0.99934	0.99913 0.99938	0.99917 0.99941	0.99922 0.99945	0.99927 0.99949	0.99931 0.99953	0.99914 0.99956	0.99894 0.99936
113	0.99949	0.99951	0.99954	0.99957	0.99961	0.99965	0.99945	0.99949	0.99975	0.99978	0.99979
115	0.99973	0.99975	0.99977	0.99980	0.99983	0.99987	0.99991	0.99994	0.99997	0.99999	1.00000
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS

<u>Applied to</u>: Nondisability Retirees from Active Duty — Enlisted [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
< 21	0.94931	0.94763	0.94838	0.95043	0.95350	0.95578	0.96002	0.96441	0.96864	0.97247	0.97564
21 22	0.94931 0.94931	0.94763 0.94763	0.94838 0.94838	0.95043 0.95043	0.95350 0.95350	0.95541 0.95543	0.95965 0.95966	0.96404 0.96406	0.96825 0.96827	0.97208 0.97209	0.97525 0.97527
23	0.94931	0.94763	0.94838	0.95043	0.95350	0.95545	0.95969	0.96408	0.96829	0.97212	0.97530
24	0.94931	0.94763	0.94838	0.95043	0.95350	0.95548	0.95972	0.96411	0.96833	0.97215	0.97533
25	0.94931	0.94763	0.94838	0.95043	0.95350	0.95552	0.95975	0.96415	0.96836	0.97219	0.97537
26 27	0.94931 0.94931	0.94763 0.94763	0.94838 0.94838	0.95043 0.95043	0.95350 0.95350	0.95555 0.95559	0.95979 0.95983	0.96418 0.96422	0.96840 0.96844	0.97223 0.97227	0.97540 0.97544
28	0.94931	0.94763	0.94838	0.95043	0.95350	0.95577	0.96001	0.96440	0.96863	0.97246	0.97563
29	0.94931	0.94763	0.94838	0.95043	0.95350	0.95595	0.96019	0.96458	0.96881	0.97265	0.97582
30	0.94931	0.94763	0.94838	0.95043	0.95350	0.95611	0.96035	0.96474	0.96898	0.97282	0.97599
31	0.94931	0.94763	0.94838	0.95043	0.95350	0.95626	0.96049	0.96489	0.96913	0.97297	0.97614
32 33	0.94931 0.94931	0.94763 0.94763	0.94838 0.94838	0.95043 0.95043	0.95350 0.95350	0.95640 0.95640	0.96064 0.96063	0.96503 0.96503	0.96928 0.96928	0.97312 0.97312	0.97629 0.97629
34	0.94931	0.94763	0.94838	0.95043	0.95350	0.95640	0.96064	0.96503	0.96928	0.97313	0.97629
35	0.94931	0.94763	0.94838	0.95043	0.95350	0.95640	0.96064	0.96503	0.96928	0.97312	0.97629
36	0.94931	0.94763	0.94838	0.95043	0.95350	0.95641	0.96065	0.96505	0.96930	0.97314	0.97631
37 38	0.94931 0.94931	0.94763 0.94763	0.94838 0.94838	0.95043 0.95043	0.95350 0.95350	0.95645 0.95652	0.96069 0.96076	0.96509 0.96516	0.96934 0.96941	0.97318 0.97326	0.97635 0.97642
39	0.94931	0.94763	0.94838	0.95043	0.95350	0.95658	0.96082	0.96522	0.96947	0.97332	0.97649
40	0.94931	0.94763	0.94838	0.95043	0.95350	0.95665	0.96089	0.96529	0.96954	0.97339	0.97656
41	0.94931	0.94763	0.94838	0.95043	0.95350	0.95668	0.96092	0.96532	0.96957	0.97342	0.97659
42 43	0.94931 0.94931	0.94763 0.94763	0.94838 0.94838	0.95043 0.95043	0.95350 0.95350	0.95670 0.95672	0.96094 0.96096	0.96534 0.96536	0.96960 0.96962	0.97345 0.97347	0.97661 0.97663
43	0.94931	0.94763	0.94838	0.95043	0.95350	0.95677	0.96101	0.96541	0.96967	0.97352	0.97668
45	0.94931	0.94763	0.94838	0.95043	0.95350	0.95682	0.96106	0.96546	0.96972	0.97357	0.97674
46	0.94931	0.94763	0.94838	0.95043	0.95350	0.95690	0.96114	0.96554	0.96981	0.97366	0.97682
47 48	0.94931	0.94763 0.94763	0.94838 0.94838	0.95043	0.95350	0.95694	0.96118 0.96118	0.96558	0.96984	0.97370	0.97686
48 49	0.94931 0.94931	0.94763	0.94838	0.95043 0.95043	0.95350 0.95350	0.95694 0.95690	0.96114	0.96558 0.96554	0.96984 0.96981	0.97370 0.97366	0.97686 0.97682
50	0.94931	0.94763	0.94838	0.95043	0.95350	0.95685	0.96109	0.96549	0.96975	0.97360	0.97676
51	0.95177	0.94933	0.95005	0.95119	0.95416	0.95734	0.96145	0.96573	0.96987	0.97363	0.97673
52	0.95429	0.95101	0.95169	0.95277	0.95482	0.95784	0.96183	0.96598	0.97001	0.97367	0.97671
53 54	0.95646 0.95846	0.95256 0.95413	0.95322 0.95477	0.95428 0.95574	0.95623 0.95763	0.95829 0.95949	0.96216 0.96248	0.96620 0.96640	0.97012 0.97021	0.97369 0.97370	0.97667 0.97662
55	0.96024	0.95558	0.95619	0.95715	0.95893	0.96063	0.96348	0.96658	0.97029	0.97369	0.97656
56	0.96186	0.95699	0.95757	0.95848	0.96022	0.96170	0.96446	0.96741	0.97036	0.97368	0.97649
57	0.96307	0.95836	0.95892	0.95978	0.96143	0.96276	0.96537	0.96822	0.97102	0.97366	0.97642
58 59	0.96391 0.96476	0.95981 0.96109	0.96034 0.96160	0.96110 0.96238	0.96266 0.96381	0.96380 0.96481	0.96632	0.96901 0.96981	0.97171 0.97236	0.97421 0.97477	0.97637 0.97683
60	0.96537	0.96252	0.96300	0.96364	0.96505	0.96586	0.96721 0.96814	0.97060	0.97305	0.97532	0.97730
61	0.96602	0.96402	0.96448	0.96500	0.96624	0.96698	0.96908	0.97140	0.97372	0.97590	0.97776
62	0.96673	0.96542	0.96585	0.96636	0.96746	0.96800	0.97003	0.97219	0.97437	0.97644	0.97823
63	0.96772	0.96688	0.96728	0.96769	0.96873	0.96911	0.97094	0.97300	0.97502	0.97696	0.97866
64 65	0.96904 0.97069	0.96856 0.97053	0.96894 0.97088	0.96916 0.97086	0.97005 0.97151	0.97032 0.97159	0.97195 0.97308	0.97380 0.97471	0.97572 0.97640	0.97749 0.97807	0.97908 0.97951
66	0.97250	0.97261	0.97291	0.97275	0.97311	0.97293	0.97421	0.97568	0.97714	0.97861	0.97997
67	0.97442	0.97481	0.97508	0.97474	0.97490	0.97442	0.97539	0.97663	0.97794	0.97920	0.98039
68	0.97656	0.97719	0.97741	0.97688	0.97681	0.97610	0.97673	0.97765	0.97874	0.97985	0.98086
69 70	0.97874 0.98088	0.97970 0.98223	0.97989 0.98237	0.97917 0.98152	0.97884 0.98095	0.97790 0.97977	0.97823 0.97980	0.97880 0.98007	0.97958 0.98051	0.98048 0.98114	0.98138 0.98187
71	0.98282	0.98455	0.98465	0.98379	0.98305	0.98165	0.98138	0.98137	0.98153	0.98187	0.98239
72	0.98445	0.98660	0.98666	0.98584	0.98504	0.98352	0.98298	0.98268	0.98259	0.98268	0.98297
73	0.98594	0.98835	0.98839	0.98762	0.98682	0.98529	0.98456	0.98400	0.98366	0.98354	0.98363
74 75	0.98721 0.98833	0.98978 0.99091	0.98979 0.99090	0.98912 0.99032	0.98835 0.98962	0.98687 0.98824	0.98607 0.98741	0.98533 0.98661	0.98476 0.98588	0.98444 0.98536	0.98436 0.98511
76	0.98933	0.99180	0.99177	0.99127	0.99064	0.98938	0.98857	0.98775	0.98697	0.98632	0.98590
77	0.99016	0.99243	0.99239	0.99199	0.99143	0.99028	0.98953	0.98873	0.98794	0.98725	0.98671
78	0.99081	0.99287	0.99283	0.99250	0.99203	0.99098	0.99030	0.98955	0.98879	0.98809	0.98752
79	0.99137	0.99310	0.99306	0.99282	0.99243	0.99150	0.99087	0.99020	0.98950	0.98882	0.98825
80 81	0.99190 0.99242	0.99317 0.99316	0.99312 0.99312	0.99297 0.99301	0.99267 0.99279	0.99185 0.99208	0.99131 0.99162	0.99069 0.99109	0.99006 0.99049	0.98944 0.98994	0.98889 0.98944
82	0.99296	0.99312	0.99308	0.99299	0.99282	0.99219	0.99183	0.99138	0.99087	0.99033	0.98988
83	0.99353	0.99310	0.99306	0.99296	0.99282	0.99223	0.99195	0.99159	0.99115	0.99069	0.99024
84	0.99411	0.99312	0.99309	0.99297	0.99282	0.99225	0.99201	0.99172	0.99136	0.99096	0.99057
85 86	0.99475 0.99546	0.99322 0.99341	0.99319 0.99337	0.99304 0.99318	0.99287 0.99298	0.99227 0.99234	0.99205 0.99212	0.99179 0.99190	0.99150 0.99163	0.99116 0.99137	0.99083 0.99109
87	0.99625	0.99367	0.99363	0.99340	0.99316	0.99245	0.99222	0.99198	0.99175	0.99151	0.99129
88	0.99710	0.99400	0.99396	0.99369	0.99341	0.99261	0.99234	0.99209	0.99184	0.99162	0.99143
89	0.99799	0.99441	0.99437	0.99405	0.99372	0.99282	0.99250	0.99221	0.99194	0.99171	0.99155
90 91	0.99893 0.99993	0.99488 0.99540	0.99483 0.99535	0.99447 0.99495	0.99409 0.99451	0.99308 0.99339	0.99271 0.99296	0.99237 0.99257	0.99206 0.99221	0.99182 0.99193	0.99165 0.99175
92	1.00096	0.99599	0.99593	0.99548	0.99499	0.99376	0.99327	0.99282	0.99241	0.99208	0.99188
93	1.00202	0.99663	0.99656	0.99607	0.99552	0.99418	0.99363	0.99311	0.99264	0.99227	0.99203
94	1.00312	0.99731	0.99723	0.99669	0.99609	0.99465	0.99403	0.99345	0.99292	0.99250	0.99222
95 96	1.00424 1.00537	0.99802 0.99876	0.99794 0.99867	0.99736 0.99806	0.99670 0.99737	0.99517 0.99576	0.99447 0.99502	0.99383 0.99432	0.99323 0.99368	0.99276 0.99317	0.99244 0.99282
97	1.00652	0.99952	0.99942	0.99879	0.99806	0.99639	0.99560	0.99485	0.99416	0.99360	0.99322
98	1.00767	1.00029	1.00019	0.99952	0.99875	0.99703	0.99619	0.99539	0.99466	0.99405	0.99364
99	1.00883	1.00107	1.00095	1.00027	0.99946	0.99766	0.99680	0.99595	0.99517	0.99452	0.99407
100 101	1.00999 1.00932	1.00185 1.00172	1.00172 1.00161	1.00101 1.00136	1.00017 1.00053	0.99830 0.99864	0.99739 0.99774	0.99652 0.99689	0.99569 0.99611	0.99500 0.99543	0.99452 0.99495
101	1.00865	1.00172	1.00149	1.00136	1.00090	0.99896	0.99808	0.99724	0.99647	0.99586	0.99538
103	1.00799	1.00148	1.00138	1.00117	1.00084	0.99929	0.99843	0.99761	0.99685	0.99623	0.99583
104	1.00732	1.00135	1.00126	1.00108	1.00078	0.99923	0.99879	0.99798	0.99723	0.99662	0.99620
105	1.00666	1.00123	1.00115	1.00099	1.00072	0.99917	0.99877	0.99837 0.99842	0.99762	0.99701	0.99659
106 107	1.00599 1.00533	1.00111 1.00098	1.00103 1.00092	1.00090 1.00080	1.00066 1.00060	0.99913 0.99911	0.99878 0.99880	0.99842	0.99804 0.99815	0.99743 0.99786	0.99699 0.99742
107	1.00466	1.00086	1.00080	1.00071	1.00054	0.99909	0.99883	0.99855	0.99826	0.99801	0.99785
109	1.00399	1.00074	1.00069	1.00062	1.00048	0.99907	0.99885	0.99862	0.99836	0.99815	0.99802
110	1.00333	1.00062	1.00057	1.00052	1.00042	0.99905	0.99887	0.99869	0.99847	0.99829	0.99819
111 112	1.00266 1.00200	1.00049 1.00037	1.00046 1.00034	1.00043 1.00034	1.00036 1.00030	1.00025 1.00023	1.00011 1.00014	0.99997 1.00004	0.99983 0.99994	0.99970 0.99985	0.99961 0.99977
113	1.00133	1.00037	1.00034	1.00034	1.00030	1.00023	1.00014	1.00011	1.00005	0.99999	0.99994
114	1.00067	1.00012	1.00011	1.00015	1.00018	1.00019	1.00018	1.00017	1.00016	1.00014	1.00011
115	1.00000	1.00000	1.00000	1.00006	1.00012	1.00017	1.00021	1.00024	1.00027	1.00028	1.00028
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to</u>: Nondisability Retirees from Active Duty — Enlisted [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

	-					Projection Year					
Age	2024 0.97782	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
< 21 21	0.97782 0.97743	0.97940 0.97901	0.98096 0.98058	0.98246 0.98208	0.98385 0.98347	0.98513 0.98475	0.98625 0.98587	0.98716 0.98678	0.98786 0.98748	0.98832 0.98794	0.98848 0.98811
22	0.97745	0.97903	0.98060	0.98210	0.98348	0.98476	0.98589	0.98680	0.98750	0.98796	0.98813
23	0.97747	0.97906	0.98062	0.98212	0.98351	0.98479	0.98591	0.98682	0.98753	0.98798	0.98815
24	0.97751	0.97909	0.98065	0.98215	0.98354	0.98482	0.98594	0.98685	0.98756	0.98801	0.98818
25	0.97754	0.97913	0.98069	0.98219	0.98358	0.98486	0.98598	0.98689	0.98760	0.98805	0.98822
26 27	0.97758	0.97916	0.98073	0.98223	0.98362	0.98490	0.98602	0.98693	0.98763	0.98809	0.98826 0.98829
28	0.97762 0.97781	0.97920 0.97939	0.98077 0.98096	0.98227 0.98246	0.98366 0.98384	0.98494 0.98512	0.98606 0.98624	0.98697 0.98716	0.98767 0.98786	0.98813 0.98831	0.98848
29	0.97800	0.97958	0.98114	0.98264	0.98403	0.98531	0.98642	0.98734	0.98804	0.98849	0.98866
30	0.97817	0.97975	0.98131	0.98281	0.98420	0.98547	0.98659	0.98751	0.98821	0.98866	0.98882
31	0.97832	0.97991	0.98147	0.98296	0.98435	0.98563	0.98674	0.98766	0.98836	0.98881	0.98897
32	0.97847	0.98005	0.98161	0.98311	0.98450	0.98577	0.98689	0.98780	0.98850	0.98895	0.98911
33 34	0.97847 0.97847	0.98005 0.98006	0.98161 0.98162	0.98311 0.98311	0.98450 0.98450	0.98577 0.98578	0.98688 0.98689	0.98780 0.98781	0.98850 0.98851	0.98895 0.98895	0.98911 0.98911
35	0.97847	0.98006	0.98162	0.98311	0.98450	0.98578	0.98689	0.98781	0.98850	0.98895	0.98911
36	0.97849	0.98007	0.98163	0.98313	0.98452	0.98579	0.98690	0.98782	0.98852	0.98897	0.98913
37	0.97853	0.98011	0.98167	0.98317	0.98456	0.98583	0.98695	0.98786	0.98856	0.98901	0.98917
38	0.97860	0.98019	0.98175	0.98324	0.98463	0.98590	0.98702	0.98793	0.98863	0.98908	0.98924
39	0.97867 0.97874	0.98025 0.98032	0.98181 0.98188	0.98330 0.98337	0.98469 0.98476	0.98596 0.98604	0.98708 0.98715	0.98799 0.98806	0.98869 0.98876	0.98914 0.98921	0.98930 0.98937
40 41	0.97877	0.98035	0.98191	0.98340	0.98479	0.98606	0.98717	0.98809	0.98879	0.98923	0.98939
42	0.97879	0.98037	0.98193	0.98343	0.98482	0.98609	0.98720	0.98812	0.98881	0.98926	0.98942
43	0.97881	0.98040	0.98195	0.98345	0.98484	0.98611	0.98722	0.98814	0.98883	0.98928	0.98944
44	0.97886	0.98045	0.98200	0.98349	0.98489	0.98616	0.98727	0.98818	0.98888	0.98933	0.98948
45	0.97892	0.98050	0.98206	0.98355	0.98494	0.98621	0.98732	0.98824	0.98893	0.98938	0.98954
46 47	0.97900 0.97904	0.98059 0.98062	0.98214 0.98218	0.98363 0.98367	0.98502 0.98506	0.98629 0.98633	0.98740 0.98744	0.98832 0.98836	0.98902 0.98905	0.98946 0.98950	0.98962 0.98965
48	0.97904	0.98063	0.98218	0.98367	0.98506	0.98633	0.98744	0.98836	0.98905	0.98950	0.98965
49	0.97900	0.98059	0.98214	0.98363	0.98502	0.98629	0.98740	0.98832	0.98902	0.98946	0.98962
50	0.97894	0.98053	0.98208	0.98357	0.98497	0.98624	0.98735	0.98826	0.98896	0.98940	0.98956
51	0.97888	0.98047	0.98202	0.98351	0.98491	0.98618	0.98729	0.98820	0.98890	0.98935	0.98950
52	0.97884	0.98042	0.98198	0.98347	0.98486	0.98613	0.98724	0.98816	0.98886	0.98930	0.98946
53 54	0.97878 0.97870	0.98036 0.98029	0.98192 0.98185	0.98341 0.98334	0.98481 0.98473	0.98608 0.98600	0.98719 0.98711	0.98811 0.98803	0.98880 0.98873	0.98925 0.98918	0.98941 0.98933
55	0.97862	0.98021	0.98177	0.98326	0.98465	0.98592	0.98704	0.98795	0.98865	0.98910	0.98926
56	0.97854	0.98013	0.98169	0.98318	0.98457	0.98584	0.98696	0.98787	0.98857	0.98902	0.98918
57	0.97845	0.98003	0.98159	0.98309	0.98448	0.98575	0.98687	0.98778	0.98848	0.98893	0.98909
58	0.97838	0.97996	0.98152	0.98302	0.98441	0.98568	0.98680	0.98771	0.98841	0.98886	0.98902
59 60	0.97833 0.97873	0.97991 0.97989	0.98148 0.98145	0.98297 0.98295	0.98436 0.98434	0.98564 0.98561	0.98675 0.98673	0.98767 0.98764	0.98837 0.98834	0.98882 0.98879	0.98898 0.98896
61	0.97913	0.98023	0.98144	0.98293	0.98432	0.98560	0.98671	0.98763	0.98833	0.98878	0.98894
62	0.97952	0.98059	0.98173	0.98293	0.98432	0.98560	0.98671	0.98763	0.98833	0.98878	0.98894
63	0.97991	0.98092	0.98202	0.98317	0.98432	0.98559	0.98671	0.98762	0.98832	0.98877	0.98894
64	0.98027	0.98125	0.98229	0.98340	0.98450	0.98559	0.98670	0.98762	0.98832	0.98877	0.98893
65	0.98062	0.98156	0.98258	0.98362	0.98468	0.98573	0.98671	0.98763	0.98833	0.98878	0.98894
66 67	0.98098 0.98136	0.98187 0.98219	0.98285 0.98311	0.98386 0.98408	0.98487 0.98506	0.98587 0.98601	0.98681 0.98692	0.98764 0.98771	0.98834 0.98836	0.98879 0.98881	0.98895 0.98897
68	0.98172	0.98253	0.98339	0.98431	0.98525	0.98617	0.98703	0.98780	0.98842	0.98884	0.98901
69	0.98212	0.98285	0.98369	0.98455	0.98544	0.98633	0.98716	0.98789	0.98849	0.98889	0.98905
70	0.98255	0.98320	0.98397	0.98481	0.98565	0.98649	0.98729	0.98799	0.98856	0.98895	0.98910
71	0.98297	0.98359	0.98428	0.98506	0.98587	0.98666	0.98743	0.98810	0.98864	0.98902	0.98916
72 73	0.98340 0.98389	0.98395 0.98434	0.98462 0.98493	0.98532 0.98561	0.98607 0.98630	0.98684 0.98701	0.98756 0.98771	0.98821 0.98832	0.98873 0.98882	0.98909 0.98917	0.98923 0.98930
74	0.98446	0.98477	0.98527	0.98588	0.98653	0.98720	0.98785	0.98844	0.98891	0.98924	0.98937
75	0.98509	0.98526	0.98563	0.98615	0.98676	0.98739	0.98799	0.98854	0.98900	0.98932	0.98944
76	0.98574	0.98581	0.98604	0.98645	0.98698	0.98756	0.98813	0.98865	0.98908	0.98938	0.98950
77	0.98642	0.98637	0.98651	0.98678	0.98721	0.98772	0.98825	0.98874	0.98915	0.98944	0.98955
78	0.98713	0.98696	0.98699	0.98717	0.98747	0.98790	0.98837	0.98883	0.98922	0.98948	0.98959
79 80	0.98783 0.98847	0.98757 0.98817	0.98748 0.98799	0.98756 0.98797	0.98778 0.98809	0.98808 0.98832	0.98849	0.98890 0.98897	0.98926	0.98952	0.98961
81	0.98903	0.98872	0.98850	0.98839	0.98842	0.98857	0.98861 0.98879	0.98904	0.98930 0.98933	0.98954 0.98955	0.98963 0.98964
82	0.98951	0.98920	0.98896	0.98880	0.98875	0.98882	0.98898	0.98918	0.98937	0.98956	0.98965
83	0.98990	0.98961	0.98936	0.98918	0.98908	0.98908	0.98917	0.98931	0.98946	0.98957	0.98964
84	0.99021	0.98995	0.98971	0.98951	0.98938	0.98933	0.98935	0.98944	0.98956	0.98964	0.98963
85	0.99052	0.99021	0.98999	0.98980	0.98964	0.98955	0.98954	0.98957	0.98965	0.98971	0.98969
86 87	0.99083 0.99109	0.99057 0.99087	0.99029 0.99062	0.99010 0.99036	0.98994 0.99019	0.98983 0.99007	0.98978 0.98999	0.98977 0.98995	0.98981 0.98996	0.98984 0.98997	0.98982 0.98993
88	0.99128	0.99111	0.99090	0.99066	0.99040	0.99028	0.99018	0.99012	0.99009	0.99008	0.99004
89	0.99143	0.99131	0.99114	0.99093	0.99069	0.99045	0.99035	0.99027	0.99022	0.99019	0.99014
90	0.99155	0.99146	0.99134	0.99116	0.99094	0.99072	0.99049	0.99040	0.99034	0.99029	0.99024
91	0.99166	0.99160	0.99150	0.99136	0.99117	0.99096	0.99075	0.99052	0.99045	0.99039	0.99033
92 93	0.99178 0.99192	0.99173 0.99188	0.99166 0.99182	0.99155 0.99173	0.99139 0.99159	0.99120 0.99143	0.99099 0.99124	0.99077 0.99102	0.99056 0.99081	0.99050 0.99061	0.99043 0.99054
94	0.99209	0.99205	0.99199	0.99192	0.99180	0.99165	0.99148	0.99128	0.99107	0.99086	0.99066
95	0.99229	0.99224	0.99218	0.99211	0.99201	0.99188	0.99172	0.99153	0.99133	0.99112	0.99092
96	0.99265	0.99259	0.99253	0.99246	0.99236	0.99224	0.99210	0.99192	0.99173	0.99152	0.99132
97	0.99303	0.99296	0.99289	0.99282	0.99272	0.99261	0.99248	0.99231	0.99213	0.99193	0.99172
98	0.99343	0.99334	0.99326	0.99318	0.99309	0.99298	0.99286	0.99270	0.99252	0.99233	0.99213
99 100	0.99384 0.99426	0.99373 0.99413	0.99364 0.99404	0.99356 0.99394	0.99346 0.99384	0.99336 0.99373	0.99324 0.99362	0.99308 0.99347	0.99291 0.99330	0.99273 0.99312	0.99253 0.99292
101	0.99468	0.99454	0.99442	0.99432	0.99421	0.99410	0.99398	0.99384	0.99368	0.99350	0.99330
102	0.99510	0.99493	0.99480	0.99469	0.99457	0.99446	0.99434	0.99420	0.99404	0.99387	0.99367
103	0.99553	0.99535	0.99521	0.99508	0.99495	0.99483	0.99471	0.99457	0.99441	0.99424	0.99405
104	0.99598	0.99578	0.99562	0.99548	0.99534	0.99522	0.99509	0.99494	0.99479	0.99462	0.99443
105	0.99634	0.99623	0.99605	0.99590	0.99574	0.99561	0.99548	0.99533	0.99518	0.99501	0.99482
106 107	0.99673 0.99713	0.99658 0.99696	0.99651 0.99685	0.99634 0.99680	0.99617 0.99662	0.99603 0.99647	0.99589 0.99632	0.99574 0.99617	0.99558 0.99601	0.99542 0.99584	0.99522 0.99565
107	0.99754	0.99733	0.99720	0.99712	0.99708	0.99692	0.99676	0.99660	0.99643	0.99626	0.99607
109	0.99794	0.99771	0.99755	0.99744	0.99737	0.99736	0.99720	0.99703	0.99686	0.99669	0.99650
110	0.99812	0.99809	0.99790	0.99776	0.99767	0.99763	0.99764	0.99746	0.99729	0.99711	0.99692
111	0.99955	0.99952	0.99947	0.99930	0.99918	0.99911	0.99909	0.99909	0.99891	0.99872	0.99851
112	0.99973	0.99970	0.99967	0.99962	0.99948	0.99939	0.99934	0.99932	0.99933	0.99914	0.99894
113 114	0.99991 1.00010	0.99989 1.00008	0.99986 1.00005	0.99982 1.00001	0.99977 0.99997	0.99966 0.99993	0.99959 0.99984	0.99956 0.99980	0.99956 0.99978	0.99957 0.99978	0.99936 0.99979
115	1.00010	1.00026	1.00024	1.00021	1.00017	1.00013	1.00010	1.00003	1.00000	1.00000	1.00000
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS

<u>Applied to</u>: Nondisability Retirees from Reserve Duty – Officer [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
< 21	0.99343	1.00331	1.00308	1.00243	1.00147	0.99657	0.99524	0.99387	0.99308	0.99208	0.99169
21 22	0.99343 0.99343	1.00331 1.00331	1.00308 1.00308	1.00243 1.00243	1.00147 1.00147	0.99567 0.99571	0.99434 0.99439	0.99297 0.99301	0.99232 0.99235	0.99137 0.99140	0.99112 0.99115
22 23	0.99343	1.00331	1.00308	1.00243	1.00147	0.99577	0.99444	0.99307	0.99235	0.99145	0.99115
24	0.99343	1.00331	1.00308	1.00243	1.00147	0.99584	0.99452	0.99314	0.99246	0.99151	0.99124
25	0.99343	1.00331	1.00308	1.00243	1.00147	0.99593	0.99461	0.99323	0.99254	0.99158	0.99129
26	0.99343	1.00331	1.00308	1.00243	1.00147	0.99602	0.99469	0.99332	0.99261	0.99165	0.99135
27	0.99343	1.00331	1.00308	1.00243	1.00147	0.99612	0.99479	0.99341	0.99270	0.99172	0.99141
28	0.99343	1.00331	1.00308	1.00243	1.00147	0.99623	0.99490	0.99352	0.99279	0.99181	0.99148
29 30	0.99343	1.00331	1.00308	1.00243	1.00147 1.00147	0.99629	0.99496 0.99497	0.99359 0.99360	0.99284	0.99186	0.99152 0.99153
31	0.99343 0.99343	1.00331 1.00331	1.00308 1.00308	1.00243 1.00243	1.00147	0.99630 0.99628	0.99495	0.99357	0.99285 0.99283	0.99187 0.99185	0.99151
32	0.99343	1.00331	1.00308	1.00243	1.00147	0.99624	0.99491	0.99353	0.99280	0.99182	0.99149
33	0.99343	1.00331	1.00308	1.00243	1.00147	0.99621	0.99488	0.99350	0.99277	0.99179	0.99147
34	0.99343	1.00331	1.00308	1.00243	1.00147	0.99625	0.99492	0.99354	0.99281	0.99183	0.99149
35	0.99343	1.00331	1.00308	1.00243	1.00147	0.99630	0.99497	0.99359	0.99285	0.99187	0.99152
36	0.99343	1.00331	1.00308	1.00243	1.00147	0.99637	0.99505	0.99367	0.99291	0.99193	0.99157
37	0.99343	1.00331	1.00308	1.00243	1.00147 1.00147	0.99648	0.99515	0.99377 0.99387	0.99300 0.99308	0.99201 0.99208	0.99164
38 39	0.99343 0.99343	1.00331 1.00331	1.00308 1.00308	1.00243 1.00243	1.00147	0.99657 0.99666	0.99524 0.99533	0.99396	0.99316	0.99206	0.99170 0.99175
40	0.99343	1.00331	1.00308	1.00243	1.00147	0.99681	0.99548	0.99410	0.99329	0.99227	0.99185
41	0.99343	1.00331	1.00308	1.00243	1.00147	0.99699	0.99566	0.99428	0.99344	0.99241	0.99196
42	0.99343	1.00331	1.00308	1.00243	1.00147	0.99730	0.99597	0.99460	0.99370	0.99266	0.99216
43	0.99343	1.00331	1.00308	1.00243	1.00147	0.99779	0.99646	0.99508	0.99412	0.99305	0.99246
44	0.99343	1.00331	1.00308	1.00243	1.00147	0.99823	0.99690	0.99552	0.99449	0.99340	0.99274
45	0.99343	1.00331	1.00308	1.00243	1.00147	0.99864	0.99730	0.99592	0.99483	0.99372	0.99299
46 47	0.99343 0.99343	1.00331 1.00331	1.00308 1.00308	1.00243 1.00243	1.00147 1.00147	0.99904 0.99930	0.99771 0.99796	0.99633 0.99658	0.99517 0.99539	0.99403 0.99424	0.99324 0.99340
48	0.99343	1.00331	1.00308	1.00243	1.00147	0.99936	0.99803	0.99665	0.99545	0.99429	0.99345
49	0.99343	1.00331	1.00308	1.00243	1.00147	0.99946	0.99813	0.99674	0.99553	0.99436	0.99350
50	0.99343	1.00331	1.00308	1.00243	1.00147	0.99957	0.99824	0.99685	0.99562	0.99445	0.99357
51	0.99343	1.00331	1.00308	1.00243	1.00147	0.99964	0.99831	0.99693	0.99568	0.99451	0.99362
52	0.99343	1.00331	1.00308	1.00243	1.00147	0.99966	0.99833	0.99695	0.99570	0.99452	0.99363
53	0.99343	1.00331	1.00308	1.00243	1.00147	0.99963	0.99830	0.99691	0.99567	0.99450	0.99361
54 55	0.99343 0.99343	1.00331 1.00331	1.00308 1.00308	1.00243 1.00243	1.00147 1.00147	0.99952 0.99936	0.99819 0.99802	0.99681 0.99664	0.99558 0.99544	0.99441 0.99428	0.99354 0.99344
56	0.99343	1.00331	1.00308	1.00243	1.00147	0.99916	0.99782	0.99644	0.99527	0.99413	0.99332
57	0.99343	1.00331	1.00308	1.00243	1.00147	0.99896	0.99763	0.99624	0.99510	0.99397	0.99319
58	0.99343	1.00331	1.00308	1.00243	1.00147	0.99879	0.99746	0.99608	0.99497	0.99384	0.99309
59	0.99343	1.00331	1.00308	1.00243	1.00147	0.99868	0.99735	0.99597	0.99487	0.99375	0.99302
60	0.99343	1.00331	1.00308	1.00243	1.00147	0.99860	0.99727	0.99589	0.99480	0.99369	0.99297
61	0.99248	1.00141	1.00121	1.00158	1.00072	0.99793	0.99674	0.99550	0.99455	0.99355	0.99291
62 63	0.99139 0.98974	0.99924 0.99662	0.99908 0.99651	0.99968 0.99746	0.99987 0.99795	0.99718 0.99629	0.99615 0.99545	0.99507 0.99456	0.99428 0.99395	0.99340 0.99322	0.99285 0.99278
64	0.98760	0.99398	0.99391	0.99500	0.99590	0.99455	0.99476	0.99407	0.99364	0.99322	0.99278
65	0.98592	0.99139	0.99136	0.99255	0.99365	0.99274	0.99331	0.99361	0.99336	0.99293	0.99269
66	0.98439	0.98875	0.98877	0.99011	0.99138	0.99076	0.99178	0.99245	0.99312	0.99282	0.99268
67	0.98266	0.98610	0.98617	0.98765	0.98912	0.98881	0.99011	0.99122	0.99222	0.99276	0.99270
68	0.98132	0.98319	0.98331	0.98506	0.98675	0.98684	0.98840	0.98982	0.99124	0.99209	0.99274
69	0.97978	0.98064	0.98081	0.98250	0.98451	0.98498	0.98681	0.98848	0.99015	0.99137	0.99225
70	0.97835	0.97866	0.97886	0.98038	0.98237	0.98330	0.98536	0.98725	0.98911	0.99053	0.99169
71 72	0.97713 0.97656	0.97717 0.97641	0.97740 0.97665	0.97875 0.97769	0.98060 0.97937	0.98166 0.98041	0.98401 0.98273	0.98611 0.98508	0.98813 0.98723	0.98971 0.98892	0.99100 0.99031
73	0.97649	0.97607	0.97632	0.97717	0.97854	0.97953	0.98170	0.98401	0.98636	0.98817	0.98963
74	0.97667	0.97599	0.97624	0.97697	0.97816	0.97897	0.98098	0.98314	0.98543	0.98743	0.98898
75	0.97711	0.97619	0.97644	0.97702	0.97808	0.97882	0.98053	0.98253	0.98466	0.98662	0.98832
76	0.97787	0.97668	0.97693	0.97735	0.97824	0.97894	0.98045	0.98215	0.98411	0.98593	0.98759
77	0.97876	0.97758	0.97781	0.97799	0.97869	0.97929	0.98063	0.98212	0.98377	0.98543	0.98696
78	0.97978	0.97859	0.97880	0.97889	0.97933	0.97979	0.98093	0.98225	0.98369	0.98509	0.98648
79 80	0.98096 0.98221	0.97977 0.98109	0.97996 0.98126	0.97991 0.98108	0.98023 0.98124	0.98047 0.98137	0.98138 0.98200	0.98250 0.98288	0.98376 0.98394	0.98497 0.98500	0.98614 0.98600
81	0.98360	0.98254	0.98268	0.98238	0.98236	0.98236	0.98282	0.98342	0.98423	0.98511	0.98599
82	0.98504	0.98419	0.98431	0.98383	0.98365	0.98348	0.98374	0.98415	0.98468	0.98532	0.98605
83	0.98655	0.98593	0.98602	0.98542	0.98502	0.98470	0.98473	0.98493	0.98528	0.98567	0.98618
84	0.98812	0.98774	0.98780	0.98708	0.98652	0.98597	0.98580	0.98578	0.98591	0.98615	0.98645
85	0.98962	0.98946	0.98949	0.98874	0.98803	0.98730	0.98687	0.98665	0.98658	0.98664	0.98682
86 87	0.99095 0.99207	0.99100 0.99235	0.99101 0.99234	0.99028 0.99164	0.98951 0.99088	0.98860 0.98985	0.98800 0.98909	0.98755 0.98848	0.98732 0.98806	0.98722 0.98782	0.98728 0.98777
88	0.99298	0.99346	0.99344	0.99281	0.99006	0.99095	0.98909	0.98938	0.98883	0.98843	0.98829
89	0.99374	0.99434	0.99430	0.99376	0.99307	0.99188	0.99106	0.99025	0.98959	0.98909	0.98882
90	0.99440	0.99500	0.99495	0.99450	0.99388	0.99265	0.99184	0.99103	0.99035	0.98975	0.98941
91	0.99494	0.99553	0.99547	0.99506	0.99453	0.99327	0.99251	0.99172	0.99106	0.99042	0.99001
92	0.99537	0.99598	0.99592	0.99554	0.99504	0.99376	0.99307	0.99233	0.99170	0.99107	0.99064
93	0.99571	0.99635	0.99629	0.99594	0.99547	0.99413	0.99351	0.99284	0.99226	0.99166	0.99125
94 95	0.99596 0.99618	0.99667 0.99694	0.99661 0.99688	0.99627 0.99656	0.99583 0.99615	0.99444 0.99470	0.99386 0.99415	0.99325 0.99358	0.99275 0.99315	0.99219 0.99265	0.99181 0.99232
96	0.99638	0.99717	0.99711	0.99683	0.99644	0.99498	0.99447	0.99394	0.99358	0.99316	0.99290
97	0.99656	0.99738	0.99732	0.99705	0.99671	0.99523	0.99477	0.99428	0.99397	0.99361	0.99342
98	0.99671	0.99759	0.99753	0.99727	0.99694	0.99546	0.99504	0.99460	0.99434	0.99401	0.99387
99	0.99687	0.99778	0.99772	0.99748	0.99717	0.99566	0.99530	0.99490	0.99469	0.99440	0.99430
100	0.99706	0.99792	0.99787	0.99766	0.99736	0.99583	0.99550	0.99517	0.99501	0.99476	0.99470
101	0.99726	0.99806	0.99801	0.99781	0.99755	0.99601	0.99569	0.99539	0.99532	0.99511	0.99508
102 103	0.99745 0.99765	0.99820 0.99833	0.99815 0.99829	0.99796 0.99811	0.99772 0.99788	0.99618 0.99638	0.99588 0.99612	0.99560 0.99586	0.99555 0.99582	0.99544 0.99573	0.99545 0.99584
103	0.99785	0.99847	0.99843	0.99826	0.99805	0.99659	0.99635	0.99612	0.99610	0.99601	0.99613
105	0.99804	0.99861	0.99858	0.99842	0.99821	0.99680	0.99658	0.99637	0.99638	0.99630	0.99642
106	0.99824	0.99875	0.99872	0.99857	0.99838	0.99703	0.99682	0.99663	0.99664	0.99660	0.99671
107	0.99843	0.99889	0.99886	0.99872	0.99855	0.99725	0.99707	0.99689	0.99691	0.99687	0.99701
108	0.99863	0.99903	0.99900	0.99887	0.99871	0.99744	0.99727	0.99711	0.99715	0.99712	0.99725
109	0.99882 0.99902	0.99917 0.99931	0.99915 0.99929	0.99902 0.99917	0.99888 0.99904	0.99762 0.99780	0.99747 0.99766	0.99733 0.99754	0.99738 0.99761	0.99736 0.99760	0.99750 0.99775
110 111	0.99902	0.99931	0.99929	0.99917	0.99904	0.99780	0.99766	0.99754	0.99761	0.99760	0.99775
111	0.99941	0.99958	0.99957	0.99948	0.99937	0.99927	0.99917	0.99908	0.99901	0.99896	0.99894
113	0.99961	0.99972	0.99972	0.99963	0.99954	0.99945	0.99937	0.99929	0.99924	0.99920	0.99918
114	0.99980	0.99986	0.99986	0.99978	0.99970	0.99963	0.99957	0.99951	0.99947	0.99944	0.99943
115	1.00000	1.00000	1.00000	0.99993	0.99987	0.99981	0.99977	0.99973	0.99970	0.99969	0.99968
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to</u>: Nondisability Retirees from Reserve Duty – Officer [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

Projection Year				
Age 2024 2025 2026 2027 2028 2029	2030 2031	2032	2033	2034
<21 0.99113 0.99072 0.99032 0.99003 0.98965 0.98929 21 0.99059 0.99021 0.98983 0.98958 0.98922 0.98887	0.98900 0.98867 0.98859 0.98825	0.98843 0.98801	0.98826 0.98782	0.98817 0.98773
21 0.99039 0.99021 0.96963 0.96960 0.96922 0.96667 22 0.99062 0.99023 0.98985 0.98960 0.98924 0.98889	0.98861 0.98827	0.98803	0.98784	0.98775
23 0.99065 0.99026 0.98989 0.98963 0.98927 0.98892	0.98864 0.98830	0.98806	0.98787	0.98778
24 0.99070 0.99031 0.98993 0.98967 0.98931 0.98895	0.98867 0.98833	0.98809	0.98791	0.98782
25	0.98872 0.98838	0.98814	0.98795	0.98787
26 0.99080 0.99041 0.99003 0.98976 0.98939 0.98904 27 0.99086 0.99046 0.99008 0.98981 0.98944 0.98909	0.98876 0.98842 0.98880 0.98846	0.98818 0.98823	0.98800 0.98805	0.98791 0.98796
28	0.98885 0.98852	0.98828	0.98810	0.98801
29 0.99097 0.99057 0.99018 0.98990 0.98953 0.98917	0.98888 0.98855	0.98831	0.98813	0.98805
30 0.99097 0.99057 0.99018 0.98990 0.98953 0.98918	0.98889 0.98855	0.98832	0.98814	0.98805
31 0.99096 0.99056 0.99017 0.98989 0.98952 0.98916	0.98888 0.98854	0.98830	0.98813	0.98804
32 0.99094 0.99054 0.99015 0.98987 0.98950 0.98915	0.98886 0.98852	0.98829	0.98811	0.98802
33 0.99092 0.99052 0.99013 0.98985 0.98949 0.98913 34 0.99094 0.99054 0.99015 0.98988 0.98951 0.98915	0.98884 0.98851 0.98886 0.98853	0.98827 0.98829	0.98809 0.98811	0.98800 0.98802
35 0.99097 0.99057 0.99018 0.98990 0.98953 0.98917	0.98889 0.98855	0.98832	0.98814	0.98805
36 0.99102 0.99061 0.99022 0.98994 0.98957 0.98921	0.98892 0.98859	0.98835	0.98817	0.98809
37 0.99108 0.99067 0.99028 0.98999 0.98962 0.98926	0.98897 0.98864	0.98840	0.98822	0.98814
38 0.99114 0.99073 0.99033 0.99004 0.98966 0.98931	0.98901 0.98868	0.98845	0.98827	0.98819
39 0.99119 0.99078 0.99038 0.99009 0.98971 0.98935 40 0.99128 0.99087 0.99046 0.99016 0.98978 0.98942	0.98906 0.98873 0.98912 0.98880	0.98849 0.98856	0.98832 0.98839	0.98823 0.98831
40 0.99128 0.99087 0.99046 0.99016 0.98978 0.98942 41 0.99139 0.99097 0.99056 0.99025 0.98987 0.98950	0.98921 0.98888	0.98865	0.98848	0.98840
42 0.99157 0.99115 0.99073 0.99041 0.99002 0.98965	0.98935 0.98903	0.98880	0.98863	0.98855
43 0.99186 0.99143 0.99100 0.99065 0.99025 0.98988	0.98957 0.98926	0.98903	0.98887	0.98880
44 0.99212 0.99168 0.99124 0.99087 0.99047 0.99009	0.98977 0.98946	0.98924	0.98908	0.98901
45 0.99236 0.99191 0.99146 0.99107 0.99066 0.99028	0.98996 0.98965	0.98943	0.98927	0.98921
46 0.99260 0.99214 0.99168 0.99127 0.99085 0.99047 47 0.99275 0.99228 0.99182 0.99140 0.99098 0.99059	0.99014 0.98984 0.99026 0.98996	0.98962 0.98974	0.98947 0.98959	0.98941 0.98953
48 0.99279 0.99232 0.99185 0.99143 0.99101 0.99062	0.99029 0.98999	0.98977	0.98962	0.98956
49 0.99285 0.99237 0.99190 0.99148 0.99105 0.99066	0.99033 0.99003	0.98981	0.98966	0.98961
50 0.99291 0.99243 0.99196 0.99153 0.99110 0.99071	0.99038 0.99008	0.98986	0.98972	0.98966
51 0.99295 0.99247 0.99200 0.99156 0.99114 0.99075	0.99041 0.99011	0.98989	0.98975	0.98970
52	0.99042 0.99013	0.98991	0.98976	0.98971
53 0.99295 0.99247 0.99200 0.99156 0.99113 0.99074 54 0.99289 0.99241 0.99194 0.99151 0.99108 0.99069	0.99040 0.99011 0.99036 0.99006	0.98989 0.98984	0.98974 0.98969	0.98969 0.98964
55 0.99279 0.99231 0.99185 0.99143 0.99100 0.99062	0.99028 0.98998	0.98976	0.98962	0.98956
56 0.99267 0.99220 0.99174 0.99133 0.99091 0.99052	0.99019 0.98989	0.98967	0.98952	0.98946
57 0.99255 0.99209 0.99163 0.99123 0.99081 0.99043	0.99010 0.98980	0.98958	0.98943	0.98937
58 0.99246 0.99200 0.99155 0.99115 0.99074 0.99035	0.99003 0.98973	0.98950	0.98935	0.98929
59 0.99239 0.99193 0.99148 0.99109 0.99068 0.99030 60 0.99234 0.99189 0.99144 0.99105 0.99065 0.99027	0.98998 0.98967 0.98994 0.98964	0.98945 0.98941	0.98929 0.98926	0.98923 0.98920
61 0.99231 0.99186 0.99141 0.99103 0.99062 0.99024	0.98992 0.98961	0.98939	0.98923	0.98917
62 0.99228 0.99183 0.99139 0.99100 0.99059 0.99022	0.98990 0.98959	0.98936	0.98921	0.98914
63 0.99225 0.99180 0.99136 0.99098 0.99057 0.99019	0.98988 0.98957	0.98934	0.98919	0.98912
64 0.99224 0.99178 0.99134 0.99096 0.99056 0.99018	0.98986 0.98955	0.98933	0.98917	0.98911
65 0.99224 0.99178 0.99134 0.99096 0.99056 0.99018	0.98986 0.98955	0.98933	0.98917	0.98911
66 0.99226 0.99181 0.99137 0.99099 0.99058 0.99020 67 0.99232 0.99186 0.99142 0.99103 0.99062 0.99024	0.98988 0.98957 0.98992 0.98962	0.98935 0.98939	0.98919 0.98924	0.98913 0.98917
68 0.99239 0.99193 0.99149 0.99109 0.99068 0.99030	0.98998 0.98967	0.98945	0.98930	0.98923
69 0.99248 0.99201 0.99156 0.99116 0.99075 0.99037	0.99004 0.98974	0.98952	0.98936	0.98930
70 0.99209 0.99210 0.99164 0.99124 0.99082 0.99044	0.99011 0.98981	0.98958	0.98943	0.98937
71 0.99162 0.99177 0.99171 0.99130 0.99088 0.99050	0.99017 0.98987	0.98965	0.98950	0.98944
72 0.99104 0.99138 0.99145 0.99136 0.99094 0.99056 73 0.99045 0.99089 0.99113 0.99115 0.99100 0.99061	0.99023 0.98993 0.99028 0.98998	0.98970 0.98976	0.98956 0.98961	0.98950 0.98956
74 0.98988 0.99039 0.99073 0.99091 0.99085 0.99067	0.99033 0.99004	0.98982	0.98967	0.98962
75 0.98932 0.98991 0.99033 0.99060 0.99067 0.99057	0.99039 0.99009	0.98987	0.98973	0.98967
76 0.98876 0.98945 0.98993 0.99028 0.99044 0.99045	0.99033 0.99014	0.98992	0.98978	0.98972
77 0.98812 0.98898 0.98957 0.98996 0.99020 0.99029	0.99026 0.99012	0.98996	0.98982	0.98977
78	0.99016 0.99009 0.99005 0.99004	0.98997 0.98997	0.98985 0.98987	0.98980 0.98983
80 0.98684 0.98763 0.98838 0.98905 0.98955 0.98983	0.98994 0.98998	0.98995	0.98989	0.98985
81 0.98671 0.98739 0.98811 0.98877 0.98932 0.98970	0.98989 0.98992	0.98994	0.98990	0.98988
82 0.98669 0.98729 0.98792 0.98857 0.98912 0.98956	0.98983 0.98993	0.98992	0.98991	0.98990
83 0.98673 0.98728 0.98785 0.98843 0.98898 0.98944	0.98977 0.98994	0.98997	0.98992	0.98991
84 0.98683 0.98732 0.98785 0.98838 0.98889 0.98936	0.98971 0.98993	0.99002	0.98999	0.98992
85 0.98706 0.98741 0.98789 0.98839 0.98887 0.98930 86 0.98745 0.98769 0.98803 0.98850 0.98895 0.98937	0.98967 0.98992 0.98973 0.99000	0.99005 0.99015	0.99006 0.99019	0.99000 0.99014
87 0.98785 0.98805 0.98830 0.98863 0.98906 0.98946	0.98981 0.99008	0.99015	0.99019	0.99014
88 0.98828 0.98842 0.98863 0.98889 0.98918 0.98956	0.98990 0.99016	0.99034	0.99041	0.99038
89 0.98874 0.98882 0.98898 0.98920 0.98943 0.98967	0.99000 0.99026	0.99044	0.99051	0.99048
90 0.98923 0.98924 0.98934 0.98952 0.98972 0.98992 91 0.98976 0.98969 0.98973 0.98986 0.99002 0.99019	0.99011 0.99035	0.99053	0.99061	0.99059
91 0.98976 0.98969 0.98973 0.98986 0.99002 0.99019 92 0.99032 0.99018 0.99015 0.99023 0.99034 0.99048	0.99035 0.99046 0.99062 0.99070	0.99063 0.99074	0.99071 0.99082	0.99069 0.99079
93 0.99090 0.99070 0.99060 0.99062 0.99069 0.99079	0.99090 0.99097	0.99098	0.99092	0.99079
94 0.99147 0.99124 0.99108 0.99104 0.99104 0.99111	0.99119 0.99123	0.99124	0.99117	0.99101
95 0.99199 0.99176 0.99157 0.99147 0.99143 0.99144	0.99149 0.99151	0.99150	0.99143	0.99126
96 0.99261 0.99238 0.99219 0.99206 0.99197 0.99193	0.99194 0.99193	0.99191	0.99182	0.99165
97 0.99317 0.99297 0.99278 0.99264 0.99251 0.99243 98 0.99368 0.99352 0.99334 0.99320 0.99306 0.99294	0.99240 0.99236 0.99287 0.99280	0.99232 0.99274	0.99222 0.99263	0.99205 0.99245
99 0.99414 0.99401 0.99386 0.99373 0.99358 0.99345	0.99335 0.99325	0.99274	0.99203	0.99245
100 0.99456 0.99446 0.99435 0.99423 0.99409 0.99394	0.99382 0.99370	0.99358	0.99345	0.99326
101 0.99497 0.99489 0.99479 0.99471 0.99457 0.99442	0.99429 0.99414	0.99401	0.99386	0.99367
102 0.99536 0.99530 0.99521 0.99515 0.99502 0.99488	0.99475 0.99458	0.99444	0.99427	0.99408
103 0.99577 0.99572 0.99565 0.99559 0.99548 0.99535	0.99522 0.99505	0.99489	0.99471	0.99451
104	0.99568 0.99550	0.99534	0.99515	0.99495
105 0.99647 0.99655 0.99651 0.99647 0.99638 0.99626 106 0.99676 0.99684 0.99693 0.99690 0.99681 0.99670	0.99613 0.99596 0.99658 0.99641	0.99579 0.99624	0.99560 0.99604	0.99539 0.99583
107 0.99705 0.99712 0.99721 0.99733 0.99725 0.99714	0.99702 0.99686	0.99669	0.99649	0.99628
108 0.99731 0.99738 0.99746 0.99757 0.99766 0.99756	0.99745 0.99728	0.99711	0.99692	0.99671
109 0.99755 0.99763 0.99770 0.99781 0.99789 0.99797	0.99787 0.99771	0.99754	0.99734	0.99713
110 0.99780 0.99787 0.99795 0.99805 0.99813 0.99820	0.99828 0.99813	0.99796	0.99777	0.99756
111 0.99870 0.99874 0.99878 0.99884 0.99889 0.99895 112 0.99895 0.99898 0.99902 0.99907 0.99912 0.99917	0.99900 0.99906 0.99923 0.99928	0.99890 0.99932	0.99871 0.99914	0.99851 0.99894
112	0.99923 0.99928 0.99945 0.99950	0.99932	0.99914	0.99894
114 0.99944 0.99946 0.99949 0.99953 0.99958 0.99962	0.99967 0.99971	0.99975	0.99978	0.99979
115 0.99969 0.99970 0.99973 0.99977 0.99981 0.99985	0.99989 0.99993	0.99997	0.99999	1.00000
> 115 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000	1.00000 1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS

<u>Applied to</u>: Nondisability Retirees from Reserve Duty — Enlisted [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age < 21	2013 0.97539	2014 0.97931	2015 0.97950	2016 0.98002	2017 0.98079	2018 0.97877	2019 0.97983	2020 0.98094	2021 0.98222	2022 0.98326	2023 0.98433
21	0.97539	0.97931	0.97950	0.98002	0.98079	0.97804	0.97963	0.98094	0.98222	0.98260	0.98373
22	0.97539	0.97931	0.97950	0.98002	0.98079	0.97807	0.97914	0.98025	0.98157	0.98263	0.98376
23	0.97539	0.97931	0.97950	0.98002	0.98079	0.97812	0.97919	0.98029	0.98162	0.98267	0.98380
24	0.97539	0.97931	0.97950	0.98002	0.98079	0.97818	0.97924	0.98035	0.98167	0.98273	0.98384
25	0.97539	0.97931	0.97950	0.98002	0.98079	0.97825	0.97932	0.98042	0.98174	0.98279	0.98390
26 27	0.97539 0.97539	0.97931 0.97931	0.97950 0.97950	0.98002 0.98002	0.98079 0.98079	0.97832 0.97840	0.97939 0.97946	0.98049 0.98057	0.98180 0.98187	0.98286 0.98292	0.98396 0.98402
28	0.97539	0.97931	0.97950	0.98002	0.98079	0.97875	0.97981	0.98092	0.98220	0.98325	0.98432
29	0.97539	0.97931	0.97950	0.98002	0.98079	0.97910	0.98016	0.98127	0.98253	0.98357	0.98460
30	0.97539	0.97931	0.97950	0.98002	0.98079	0.97941	0.98048	0.98159	0.98283	0.98386	0.98486
31	0.97539	0.97931	0.97950	0.98002	0.98079	0.97970	0.98077	0.98188	0.98310	0.98412	0.98510
32 33	0.97539 0.97539	0.97931 0.97931	0.97950 0.97950	0.98002 0.98002	0.98079 0.98079	0.97998 0.97997	0.98105 0.98104	0.98215 0.98215	0.98336 0.98335	0.98437 0.98437	0.98533 0.98533
34	0.97539	0.97931	0.97950	0.98002	0.98079	0.97998	0.98104	0.98216	0.98336	0.98438	0.98534
35	0.97539	0.97931	0.97950	0.98002	0.98079	0.97998	0.98105	0.98216	0.98336	0.98438	0.98534
36	0.97539	0.97931	0.97950	0.98002	0.98079	0.98001	0.98108	0.98219	0.98339	0.98440	0.98536
37	0.97539	0.97931	0.97950	0.98002	0.98079	0.98009	0.98116	0.98227	0.98346	0.98448	0.98542
38 39	0.97539 0.97539	0.97931 0.97931	0.97950 0.97950	0.98002 0.98002	0.98079 0.98079	0.98023 0.98035	0.98130 0.98141	0.98240 0.98252	0.98359 0.98370	0.98460 0.98471	0.98554 0.98563
40	0.97539	0.97931	0.97950	0.98002	0.98079	0.98048	0.98155	0.98266	0.98383	0.98483	0.98574
41	0.97539	0.97931	0.97950	0.98002	0.98079	0.98053	0.98160	0.98271	0.98387	0.98488	0.98579
42	0.97539	0.97931	0.97950	0.98002	0.98079	0.98058	0.98165	0.98276	0.98392	0.98492	0.98583
43	0.97539	0.97931	0.97950	0.98002	0.98079	0.98062	0.98169	0.98280	0.98396	0.98496	0.98586
44 45	0.97539 0.97539	0.97931 0.97931	0.97950 0.97950	0.98002 0.98002	0.98079 0.98079	0.98072 0.98082	0.98178 0.98189	0.98289 0.98300	0.98404 0.98414	0.98504 0.98514	0.98594 0.98602
46	0.97539	0.97931	0.97950	0.98002	0.98079	0.98098	0.98205	0.98316	0.98429	0.98528	0.98615
47	0.97539	0.97931	0.97950	0.98002	0.98079	0.98105	0.98212	0.98323	0.98436	0.98535	0.98621
48	0.97539	0.97931	0.97950	0.98002	0.98079	0.98105	0.98212	0.98323	0.98436	0.98535	0.98621
49	0.97539	0.97931	0.97950	0.98002	0.98079	0.98098	0.98205	0.98316	0.98429	0.98528	0.98615
50	0.97539	0.97931	0.97950	0.98002	0.98079	0.98087	0.98194	0.98305	0.98419	0.98518	0.98606
51 52	0.97539 0.97539	0.97931 0.97931	0.97950 0.97950	0.98002 0.98002	0.98079 0.98079	0.98075 0.98067	0.98182 0.98174	0.98293 0.98285	0.98408 0.98400	0.98508 0.98500	0.98597 0.98590
53	0.97539	0.97931	0.97950	0.98002	0.98079	0.98056	0.98163	0.98274	0.98390	0.98490	0.98581
54	0.97539	0.97931	0.97950	0.98002	0.98079	0.98042	0.98149	0.98260	0.98377	0.98477	0.98569
55	0.97539	0.97931	0.97950	0.98002	0.98079	0.98027	0.98134	0.98244	0.98363	0.98464	0.98557
56	0.97539	0.97931	0.97950	0.98002	0.98079	0.98011	0.98118	0.98229	0.98348	0.98450	0.98544
57	0.97539	0.97931	0.97950	0.98002	0.98079	0.97994	0.98101	0.98211	0.98332	0.98434	0.98530
58 59	0.97539 0.97539	0.97931 0.97931	0.97950 0.97950	0.98002 0.98002	0.98079 0.98079	0.97980 0.97972	0.98087 0.98079	0.98198 0.98190	0.98319 0.98311	0.98421 0.98414	0.98519 0.98512
60	0.97539	0.97931	0.97950	0.98002	0.98079	0.97967	0.98074	0.98185	0.98307	0.98409	0.98508
61	0.97686	0.98089	0.98105	0.98072	0.98141	0.98015	0.98110	0.98210	0.98321	0.98415	0.98508
62	0.97823	0.98206	0.98220	0.98201	0.98187	0.98053	0.98140	0.98230	0.98334	0.98421	0.98509
63	0.97961	0.98296	0.98309	0.98299	0.98296	0.98082	0.98161	0.98245	0.98343	0.98425	0.98510
64 65	0.98091 0.98216	0.98346 0.98358	0.98358 0.98370	0.98365 0.98395	0.98371 0.98418	0.98167 0.98225	0.98173 0.98244	0.98253 0.98256	0.98347 0.98350	0.98427 0.98428	0.98510 0.98511
66	0.98298	0.98366	0.98377	0.98404	0.98445	0.98271	0.98298	0.98322	0.98353	0.98431	0.98514
67	0.98364	0.98369	0.98381	0.98410	0.98451	0.98298	0.98340	0.98373	0.98414	0.98435	0.98517
68	0.98437	0.98379	0.98390	0.98416	0.98459	0.98313	0.98370	0.98416	0.98463	0.98492	0.98522
69	0.98512	0.98418	0.98429	0.98438	0.98477	0.98338	0.98394	0.98451	0.98507	0.98540	0.98575
70	0.98588	0.98461	0.98471	0.98477	0.98498	0.98365	0.98419	0.98474	0.98540	0.98581	0.98618
71 72	0.98649 0.98718	0.98518 0.98594	0.98527 0.98601	0.98523 0.98585	0.98540 0.98590	0.98400 0.98456	0.98448 0.98485	0.98501 0.98530	0.98561 0.98587	0.98611 0.98631	0.98654 0.98680
73	0.98798	0.98680	0.98686	0.98661	0.98651	0.98518	0.98538	0.98564	0.98612	0.98653	0.98696
74	0.98864	0.98781	0.98785	0.98748	0.98726	0.98591	0.98597	0.98613	0.98642	0.98675	0.98715
75	0.98922	0.98891	0.98894	0.98847	0.98811	0.98675	0.98663	0.98664	0.98682	0.98699	0.98732
76	0.98978	0.98996	0.98997	0.98947	0.98900	0.98760	0.98734	0.98719	0.98722	0.98730	0.98749
77 78	0.99028 0.99076	0.99087 0.99159	0.99087 0.99157	0.99040 0.99117	0.98988 0.99066	0.98845 0.98927	0.98804 0.98874	0.98776 0.98832	0.98764 0.98808	0.98760 0.98793	0.98772 0.98796
78 79	0.99113	0.99213	0.99210	0.99176	0.99132	0.98999	0.98941	0.98888	0.98853	0.98827	0.98820
80	0.99145	0.99257	0.99253	0.99223	0.99184	0.99060	0.99003	0.98944	0.98899	0.98864	0.98849
81	0.99172	0.99294	0.99290	0.99261	0.99225	0.99108	0.99056	0.98998	0.98946	0.98902	0.98879
82	0.99196	0.99327	0.99322	0.99295	0.99260	0.99146	0.99098	0.99045	0.98994	0.98943	0.98912
83	0.99220	0.99351	0.99346	0.99322	0.99288	0.99175	0.99130	0.99081	0.99035	0.98985	0.98947
84 85	0.99244 0.99265	0.99363 0.99366	0.99358 0.99362	0.99340 0.99348	0.99309 0.99323	0.99195 0.99210	0.99153 0.99169	0.99107 0.99126	0.99066 0.99088	0.99021 0.99049	0.98984 0.99017
86	0.99285	0.99365	0.99361	0.99351	0.99331	0.99221	0.99185	0.99145	0.99112	0.99049	0.99050
87	0.99306	0.99360	0.99357	0.99349	0.99334	0.99223	0.99194	0.99160	0.99130	0.99099	0.99076
88	0.99328	0.99354	0.99351	0.99345	0.99334	0.99219	0.99197	0.99169	0.99145	0.99117	0.99098
89	0.99351	0.99350	0.99347	0.99342	0.99333	0.99212	0.99194	0.99173	0.99156	0.99132	0.99117
90 91	0.99374 0.99398	0.99347 0.99342	0.99344 0.99341	0.99340 0.99338	0.99332 0.99331	0.99202 0.99192	0.99189 0.99182	0.99172 0.99169	0.99162 0.99164	0.99144 0.99152	0.99134 0.99148
92	0.99422	0.99338	0.99337	0.99335	0.99331	0.99183	0.99175	0.99166	0.99166	0.99158	0.99160
93	0.99432	0.99349	0.99348	0.99339	0.99336	0.99182	0.99175	0.99167	0.99169	0.99165	0.99170
94	0.99442	0.99360	0.99359	0.99351	0.99341	0.99182	0.99176	0.99169	0.99174	0.99172	0.99181
95	0.99451	0.99371	0.99370	0.99363	0.99353	0.99183	0.99179	0.99174	0.99180	0.99180	0.99191
96 97	0.99479 0.99506	0.99403 0.99434	0.99402 0.99433	0.99385 0.99416	0.99377 0.99400	0.99203	0.99195 0.99217	0.99192 0.99210	0.99201 0.99222	0.99202	0.99216
98	0.99534	0.99466	0.99465	0.99448	0.99432	0.99224 0.99245	0.99239	0.99234	0.99242	0.99226 0.99249	0.99242 0.99267
99	0.99561	0.99497	0.99496	0.99480	0.99464	0.99271	0.99260	0.99257	0.99267	0.99271	0.99292
100	0.99589	0.99528	0.99528	0.99511	0.99495	0.99297	0.99287	0.99280	0.99292	0.99297	0.99316
101	0.99616	0.99560	0.99559	0.99543	0.99527	0.99320	0.99310	0.99303	0.99314	0.99321	0.99343
102	0.99643	0.99591	0.99591	0.99574	0.99559	0.99341	0.99330	0.99323	0.99335	0.99343	0.99367
103 104	0.99671 0.99698	0.99623 0.99654	0.99622 0.99654	0.99606 0.99637	0.99590 0.99622	0.99363 0.99386	0.99352 0.99375	0.99345 0.99368	0.99357 0.99381	0.99365 0.99388	0.99392 0.99415
104	0.99726	0.99686	0.99685	0.99669	0.99622	0.99366	0.99400	0.99392	0.99405	0.99300	0.99439
106	0.99753	0.99717	0.99717	0.99701	0.99685	0.99439	0.99428	0.99421	0.99433	0.99440	0.99467
107	0.99781	0.99748	0.99748	0.99732	0.99717	0.99471	0.99460	0.99452	0.99465	0.99471	0.99497
108	0.99808	0.99780	0.99780	0.99764	0.99749	0.99502	0.99491	0.99484	0.99496	0.99501	0.99527
109	0.99835	0.99811	0.99811	0.99795	0.99780	0.99534	0.99523	0.99515	0.99527	0.99532	0.99557
110 111	0.99863 0.99890	0.99843 0.99874	0.99843 0.99874	0.99827 0.99858	0.99812 0.99844	0.99566 0.99831	0.99555 0.99820	0.99547 0.99812	0.99558 0.99807	0.99563 0.99805	0.99587 0.99807
111	0.99918	0.99906	0.99906	0.99890	0.99875	0.99862	0.99852	0.99843	0.99838	0.99836	0.99837
113	0.99945	0.99937	0.99937	0.99922	0.99907	0.99894	0.99883	0.99875	0.99870	0.99867	0.99867
114	0.99973	0.99969	0.99969	0.99953	0.99939	0.99926	0.99915	0.99907	0.99901	0.99898	0.99898
115	1.00000	1.00000	1.00000	0.99985	0.99970	0.99958	0.99947	0.99938	0.99932	0.99929	0.99928
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to</u>: Nondisability Retirees from Reserve Duty – Enlisted [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
< 21	0.98512	0.98571	0.98626	0.98687	0.98725	0.98758	0.98790	0.98810	0.98827	0.98837	0.98838
21	0.98459	0.98522	0.98580	0.98647	0.98686	0.98720	0.98752	0.98772	0.98788	0.98798	0.98798
22 23	0.98461 0.98465	0.98524 0.98528	0.98582 0.98585	0.98649 0.98652	0.98688 0.98690	0.98722 0.98724	0.98754 0.98757	0.98773 0.98776	0.98790 0.98793	0.98800 0.98802	0.98800 0.98802
24	0.98469	0.98531	0.98589	0.98655	0.98694	0.98727	0.98760	0.98779	0.98796	0.98806	0.98806
25	0.98474	0.98536	0.98594	0.98659	0.98698	0.98731	0.98763	0.98783	0.98800	0.98810	0.98810
26	0.98480	0.98541	0.98598	0.98663	0.98701	0.98735	0.98767	0.98787	0.98804	0.98813	0.98814
27	0.98485	0.98546	0.98603	0.98667	0.98705	0.98739	0.98771	0.98791	0.98808	0.98818	0.98818
28 29	0.98511 0.98537	0.98570 0.98594	0.98625 0.98647	0.98686 0.98706	0.98724 0.98743	0.98758 0.98777	0.98790 0.98808	0.98810 0.98828	0.98827 0.98845	0.98837 0.98856	0.98837 0.98857
30	0.98561	0.98616	0.98667	0.98723	0.98760	0.98794	0.98824	0.98845	0.98862	0.98873	0.98874
31	0.98582	0.98635	0.98685	0.98739	0.98776	0.98809	0.98840	0.98861	0.98878	0.98888	0.98890
32	0.98603	0.98654	0.98702	0.98754	0.98791	0.98824	0.98854	0.98875	0.98893	0.98903	0.98905
33 34	0.98603 0.98603	0.98654 0.98654	0.98702 0.98703	0.98754 0.98754	0.98791 0.98791	0.98824 0.98824	0.98854 0.98854	0.98875 0.98876	0.98893 0.98893	0.98903 0.98904	0.98905 0.98906
35	0.98603	0.98654	0.98703	0.98754	0.98791	0.98824	0.98854	0.98876	0.98893	0.98904	0.98906
36	0.98605	0.98656	0.98704	0.98756	0.98793	0.98826	0.98856	0.98877	0.98895	0.98905	0.98907
37	0.98611	0.98662	0.98709	0.98760	0.98797	0.98830	0.98860	0.98881	0.98899	0.98909	0.98911
38	0.98621	0.98671	0.98718	0.98768	0.98804	0.98837	0.98867	0.98889	0.98906	0.98916	0.98919
39 40	0.98630 0.98640	0.98679 0.98688	0.98725 0.98734	0.98774 0.98781	0.98810 0.98818	0.98843 0.98850	0.98873 0.98880	0.98895 0.98902	0.98912 0.98919	0.98923 0.98930	0.98925 0.98933
41	0.98644	0.98691	0.98737	0.98784	0.98820	0.98853	0.98883	0.98905	0.98922	0.98933	0.98935
42	0.98647	0.98695	0.98740	0.98787	0.98823	0.98856	0.98885	0.98907	0.98925	0.98935	0.98938
43	0.98650	0.98697	0.98742	0.98789	0.98825	0.98858	0.98887	0.98909	0.98927	0.98937	0.98940
44	0.98657	0.98704	0.98748	0.98794	0.98830	0.98863	0.98892	0.98914	0.98931	0.98942	0.98945
45 46	0.98665 0.98677	0.98711 0.98721	0.98755 0.98765	0.98800 0.98808	0.98836 0.98844	0.98868 0.98877	0.98897 0.98905	0.98919 0.98928	0.98937 0.98945	0.98948 0.98956	0.98951 0.98959
47	0.98682	0.98726	0.98769	0.98812	0.98848	0.98880	0.98909	0.98932	0.98949	0.98960	0.98963
48	0.98682	0.98726	0.98769	0.98812	0.98848	0.98880	0.98909	0.98932	0.98949	0.98960	0.98963
49	0.98677	0.98721	0.98765	0.98808	0.98844	0.98877	0.98905	0.98928	0.98945	0.98956	0.98959
50	0.98668	0.98714	0.98758	0.98802	0.98838	0.98871	0.98900	0.98922	0.98939	0.98950	0.98953
51 52	0.98660 0.98654	0.98706 0.98701	0.98751 0.98745	0.98796 0.98792	0.98832 0.98828	0.98865 0.98860	0.98894 0.98890	0.98916 0.98912	0.98933 0.98929	0.98944 0.98940	0.98947 0.98943
53	0.98646	0.98693	0.98739	0.98786	0.98822	0.98855	0.98884	0.98906	0.98923	0.98934	0.98937
54	0.98635	0.98684	0.98730	0.98778	0.98814	0.98847	0.98877	0.98899	0.98916	0.98927	0.98929
55	0.98624	0.98674	0.98720	0.98770	0.98806	0.98839	0.98869	0.98891	0.98908	0.98919	0.98921
56 57	0.98613 0.98600	0.98663 0.98651	0.98711 0.98700	0.98761 0.98752	0.98798 0.98789	0.98831 0.98822	0.98861 0.98852	0.98883 0.98873	0.98900 0.98891	0.98910 0.98901	0.98913 0.98903
58	0.98590	0.98642	0.98691	0.98744	0.98782	0.98815	0.98845	0.98866	0.98883	0.98894	0.98896
59	0.98584	0.98637	0.98686	0.98740	0.98777	0.98810	0.98841	0.98862	0.98879	0.98889	0.98891
60	0.98580	0.98633	0.98683	0.98737	0.98775	0.98808	0.98838	0.98859	0.98876	0.98887	0.98889
61	0.98578	0.98631	0.98681	0.98736	0.98773	0.98806	0.98837	0.98858	0.98875	0.98885	0.98887
62 63	0.98578 0.98577	0.98631 0.98631	0.98681 0.98681	0.98736 0.98735	0.98773 0.98773	0.98806 0.98806	0.98837 0.98836	0.98858 0.98857	0.98875 0.98875	0.98885 0.98885	0.98887 0.98887
64	0.98577	0.98630	0.98680	0.98735	0.98772	0.98805	0.98836	0.98857	0.98874	0.98884	0.98886
65	0.98578	0.98631	0.98681	0.98735	0.98773	0.98806	0.98836	0.98857	0.98875	0.98885	0.98887
66	0.98580	0.98633	0.98683	0.98737	0.98774	0.98807	0.98838	0.98859	0.98876	0.98887	0.98888
67	0.98583	0.98636	0.98685	0.98739	0.98776	0.98809	0.98840	0.98861	0.98878	0.98889	0.98891
68 69	0.98587 0.98594	0.98640 0.98646	0.98689 0.98695	0.98743 0.98747	0.98780 0.98784	0.98813 0.98817	0.98843 0.98848	0.98864 0.98869	0.98882 0.98886	0.98892 0.98897	0.98894 0.98899
70	0.98641	0.98653	0.98701	0.98753	0.98790	0.98823	0.98853	0.98874	0.98892	0.98902	0.98904
71	0.98679	0.98694	0.98709	0.98759	0.98796	0.98829	0.98859	0.98881	0.98898	0.98909	0.98911
72	0.98711	0.98728	0.98744	0.98766	0.98803	0.98836	0.98866	0.98888	0.98905	0.98915	0.98918
73 74	0.98733	0.98756	0.98773	0.98796	0.98810	0.98843	0.98873 0.98880	0.98895	0.98912	0.98923	0.98925
74 75	0.98747 0.98763	0.98777 0.98788	0.98798 0.98815	0.98820 0.98840	0.98835 0.98855	0.98851 0.98870	0.98887	0.98902 0.98909	0.98920 0.98927	0.98930 0.98937	0.98933 0.98940
76	0.98776	0.98802	0.98825	0.98854	0.98871	0.98885	0.98901	0.98915	0.98933	0.98944	0.98946
77	0.98789	0.98813	0.98837	0.98861	0.98881	0.98898	0.98912	0.98925	0.98938	0.98949	0.98952
78	0.98809	0.98825	0.98848	0.98872	0.98887	0.98906	0.98921	0.98933	0.98944	0.98953	0.98956
79 80	0.98827 0.98848	0.98842 0.98858	0.98858 0.98872	0.98880 0.98889	0.98897 0.98905	0.98910 0.98918	0.98927 0.98929	0.98939 0.98942	0.98949 0.98952	0.98956 0.98959	0.98959 0.98961
81	0.98872	0.98875	0.98885	0.98901	0.98913	0.98926	0.98937	0.98943	0.98954	0.98960	0.98962
82	0.98898	0.98896	0.98900	0.98913	0.98923	0.98933	0.98945	0.98951	0.98954	0.98961	0.98962
83	0.98926	0.98918	0.98918	0.98926	0.98933	0.98942	0.98951	0.98958	0.98961	0.98960	0.98962
84	0.98956	0.98943	0.98937	0.98941	0.98944	0.98951	0.98959	0.98964	0.98968	0.98967	0.98961
85 86	0.98990 0.99028	0.98968 0.99007	0.98957 0.98986	0.98957 0.98981	0.98957 0.98977	0.98960 0.98977	0.98966 0.98981	0.98971 0.98984	0.98973 0.98986	0.98972 0.98985	0.98967 0.98979
87	0.99059	0.99042	0.99022	0.99006	0.98998	0.98995	0.98996	0.98997	0.98998	0.98997	0.98991
88	0.99085	0.99071	0.99054	0.99039	0.99019	0.99012	0.99010	0.99009	0.99009	0.99007	0.99001
89	0.99106	0.99096	0.99082	0.99069	0.99049	0.99029	0.99025	0.99021	0.99020	0.99017	0.99011
90 91	0.99126 0.99144	0.99117 0.99138	0.99106 0.99128	0.99096 0.99121	0.99077 0.99103	0.99057 0.99084	0.99039 0.99066	0.99033 0.99046	0.99030 0.99041	0.99027 0.99036	0.99020 0.99029
92	0.99161	0.99157	0.99150	0.99144	0.99128	0.99110	0.99092	0.99071	0.99052	0.99046	0.99039
93	0.99176	0.99177	0.99171	0.99168	0.99152	0.99135	0.99118	0.99097	0.99077	0.99057	0.99049
94	0.99190	0.99194	0.99193	0.99191	0.99177	0.99160	0.99144	0.99123	0.99103	0.99083	0.99061
95 96	0.99204 0.99231	0.99211 0.99242	0.99213 0.99246	0.99215	0.99202 0.99240	0.99186 0.99225	0.99170 0.99210	0.99149 0.99189	0.99129 0.99170	0.99109 0.99149	0.99086 0.99127
97	0.99258	0.99271	0.99278	0.99250 0.99285	0.99277	0.99264	0.99210	0.99230	0.99210	0.99189	0.99167
98	0.99286	0.99300	0.99309	0.99319	0.99313	0.99302	0.99289	0.99269	0.99250	0.99230	0.99207
99	0.99313	0.99329	0.99340	0.99352	0.99348	0.99338	0.99327	0.99309	0.99290	0.99269	0.99247
100	0.99340	0.99359	0.99371	0.99385	0.99382	0.99375	0.99365	0.99347	0.99329	0.99309	0.99286
101 102	0.99364 0.99391	0.99385 0.99410	0.99400 0.99427	0.99416 0.99446	0.99415 0.99446	0.99409 0.99442	0.99400 0.99435	0.99384 0.99419	0.99367 0.99403	0.99347 0.99383	0.99324 0.99360
102	0.99418	0.99439	0.99455	0.99477	0.99479	0.99475	0.99469	0.99419	0.99439	0.99420	0.99397
104	0.99446	0.99469	0.99487	0.99508	0.99511	0.99510	0.99505	0.99492	0.99477	0.99458	0.99435
105	0.99470	0.99500	0.99520	0.99542	0.99545	0.99545	0.99542	0.99529	0.99515	0.99496	0.99474
106	0.99497	0.99526	0.99554	0.99578	0.99582	0.99582	0.99580	0.99568	0.99555	0.99537	0.99515
107 108	0.99526 0.99555	0.99554 0.99582	0.99581 0.99608	0.99616 0.99642	0.99621 0.99660	0.99622 0.99662	0.99620 0.99661	0.99609 0.99650	0.99596 0.99638	0.99579 0.99621	0.99557 0.99599
109	0.99584	0.99610	0.99635	0.99667	0.99685	0.99702	0.99701	0.99692	0.99680	0.99664	0.99642
110	0.99613	0.99638	0.99661	0.99693	0.99710	0.99725	0.99742	0.99733	0.99722	0.99706	0.99684
111	0.99813	0.99821	0.99832	0.99844	0.99857	0.99871	0.99884	0.99896	0.99885	0.99870	0.99851
112 113	0.99842 0.99871	0.99849 0.99877	0.99859 0.99886	0.99870 0.99895	0.99882 0.99907	0.99894 0.99918	0.99907 0.99930	0.99918 0.99940	0.99927 0.99949	0.99913 0.99955	0.99894 0.99936
113	0.99871	0.99905	0.99886	0.99895	0.99907	0.99918	0.99930	0.99940	0.99949	0.99955	0.99936
115	0.99929	0.99933	0.99939	0.99947	0.99956	0.99966	0.99975	0.99985	0.99993	0.99998	1.00000
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS

<u>Applied to:</u> Permanent Disability Retirees -- Officer [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2013 0.93518	2014 0.92268	2015	2016	2017 0.93200	2018	2019 0.94290	2020	2021	2022 0.96306	2023
< 21 21	0.93518	0.92268	0.92387 0.92387	0.92712 0.92712	0.93200	0.93617 0.93623	0.94295	0.94988 0.94993	0.95679 0.95684	0.96310	0.96820 0.96825
22	0.93518	0.92268	0.92387	0.92712	0.93200	0.93630	0.94303	0.95001	0.95692	0.96317	0.96831
23	0.94025	0.93004	0.93109	0.93042	0.93488	0.93879	0.94497	0.95141	0.95781	0.96364	0.96850
24	0.94536	0.93783	0.93875	0.93748	0.93793	0.94142	0.94703	0.95289	0.95875	0.96414	0.96870
25 26	0.95030 0.95475	0.94564 0.95283	0.94642 0.95349	0.94477 0.95179	0.94445 0.95093	0.94406 0.94978	0.94909 0.95099	0.95438 0.95574	0.95970 0.96057	0.96465 0.96511	0.96890 0.96908
27	0.95829	0.95932	0.95986	0.95819	0.95714	0.95545	0.95580	0.95698	0.96136	0.96553	0.96924
28	0.96031	0.96469	0.96513	0.96375	0.96262	0.96077	0.96050	0.96088	0.96201	0.96588	0.96938
29	0.96149	0.96895	0.96932	0.96827	0.96734	0.96543	0.96492	0.96475	0.96517	0.96615	0.96949
30	0.96229	0.97246	0.97277	0.97191	0.97124	0.96950	0.96887	0.96846	0.96838	0.96875	0.96957
31 32	0.96247 0.96150	0.97519 0.97696	0.97545 0.97719	0.97484 0.97696	0.97431 0.97665	0.97281 0.97529	0.97230 0.97501	0.97177 0.97463	0.97150 0.97427	0.97143 0.97405	0.97174 0.97400
33	0.96005	0.97782	0.97803	0.97820	0.97827	0.97714	0.97702	0.97688	0.97669	0.97642	0.97626
34	0.95871	0.97765	0.97786	0.97855	0.97903	0.97831	0.97846	0.97852	0.97860	0.97852	0.97832
35	0.95773	0.97697	0.97720	0.97816	0.97917	0.97888	0.97944	0.97978	0.98006	0.98022	0.98017
36 37	0.95701 0.95665	0.97631 0.97559	0.97655 0.97584	0.97754 0.97689	0.97883 0.97823	0.97907 0.97881	0.98004 0.98027	0.98075 0.98136	0.98126 0.98221	0.98158 0.98272	0.98172 0.98297
38	0.95626	0.97359	0.97388	0.97565	0.97714	0.97794	0.97978	0.98143	0.98270	0.98357	0.98402
39	0.95513	0.97060	0.97094	0.97334	0.97563	0.97675	0.97882	0.98091	0.98275	0.98405	0.98482
40	0.95338	0.96688	0.96729	0.97022	0.97323	0.97530	0.97770	0.98007	0.98237	0.98421	0.98533
41	0.95126	0.96306	0.96354	0.96670	0.97033	0.97321 0.97071	0.97647 0.97474	0.97917	0.98174	0.98398	0.98555
42 43	0.94888 0.94630	0.95939 0.95544	0.95993 0.95605	0.96320 0.95964	0.96715 0.96380	0.96779	0.97251	0.97827 0.97682	0.98114 0.98047	0.98359 0.98320	0.98548 0.98525
44	0.94389	0.95175	0.95242	0.95607	0.96063	0.96494	0.97008	0.97505	0.97941	0.98282	0.98505
45	0.94212	0.94848	0.94921	0.95281	0.95750	0.96230	0.96771	0.97308	0.97804	0.98205	0.98484
46	0.94109	0.94585	0.94662	0.95004	0.95473	0.95977	0.96560	0.97122	0.97651	0.98103	0.98431
47 48	0.94061 0.94084	0.94387 0.94269	0.94469 0.94353	0.94788 0.94639	0.95242 0.95072	0.95752 0.95567	0.96348 0.96163	0.96948 0.96772	0.97497 0.97352	0.97976 0.97846	0.98346 0.98237
48	0.94165	0.94269	0.94353	0.94547	0.94949	0.95420	0.96002	0.96610	0.97352	0.97720	0.98123
50	0.94298	0.94142	0.94228	0.94487	0.94874	0.95309	0.95872	0.96466	0.97054	0.97583	0.98012
51	0.94476	0.94189	0.94273	0.94484	0.94856	0.95264	0.95794	0.96364	0.96935	0.97460	0.97893
52 53	0.94754 0.95112	0.94322 0.94564	0.94404 0.94642	0.94566 0.94739	0.94885 0.95002	0.95268 0.95318	0.95772 0.95794	0.96306 0.96296	0.96850 0.96800	0.97357 0.97279	0.97785 0.97690
53 54	0.95112	0.94564	0.94642	0.94739	0.95002	0.95318	0.95794	0.96296	0.96800	0.97279	0.97612
55	0.95984	0.95270	0.95336	0.95324	0.95455	0.95610	0.95951	0.96353	0.96790	0.97199	0.97553
56	0.96510	0.95715	0.95773	0.95716	0.95775	0.95853	0.96110	0.96440	0.96811	0.97189	0.97519
57	0.97062	0.96240	0.96289	0.96167	0.96166	0.96151	0.96332	0.96574	0.96875	0.97191	0.97495
58 59	0.97596 0.98106	0.96822 0.97387	0.96860 0.97415	0.96683 0.97219	0.96603 0.97071	0.96509 0.96886	0.96600 0.96903	0.96763 0.96979	0.96978 0.97121	0.97229 0.97297	0.97483 0.97500
60	0.98522	0.97930	0.97949	0.97737	0.97558	0.97294	0.97223	0.97226	0.97288	0.97402	0.97544
61	0.98846	0.98405	0.98415	0.98213	0.98009	0.97706	0.97561	0.97482	0.97480	0.97525	0.97619
62	0.99050	0.98787	0.98791	0.98616	0.98414	0.98082	0.97902	0.97755	0.97681	0.97673	0.97713
63	0.99143 0.99119	0.99069 0.99190	0.99068	0.98928 0.99119	0.98747 0.98975	0.98416 0.98667	0.98210 0.98469	0.98032 0.98274	0.97899 0.98120	0.97831 0.98007	0.97830 0.97959
64 65	0.98958	0.99148	0.99187 0.99145	0.99159	0.99090	0.98825	0.98659	0.98480	0.98319	0.98194	0.98110
66	0.98715	0.98957	0.98958	0.99053	0.99073	0.98891	0.98774	0.98634	0.98495	0.98368	0.98275
67	0.98481	0.98685	0.98690	0.98838	0.98946	0.98860	0.98827	0.98738	0.98638	0.98532	0.98436
68	0.98281	0.98409	0.98420	0.98582	0.98749	0.98756 0.98608	0.98813 0.98748	0.98804	0.98749 0.98832	0.98675 0.98792	0.98591
69 70	0.98136 0.98071	0.98197 0.98069	0.98211 0.98086	0.98353 0.98193	0.98538 0.98359	0.98452	0.98643	0.98819 0.98787	0.98868	0.98882	0.98728 0.98842
71	0.98072	0.98034	0.98052	0.98116	0.98246	0.98325	0.98528	0.98715	0.98856	0.98926	0.98928
72	0.98121	0.98075	0.98092	0.98118	0.98203	0.98252	0.98431	0.98625	0.98801	0.98921	0.98969
73	0.98218	0.98166	0.98181	0.98178	0.98222	0.98233	0.98373	0.98542	0.98723	0.98873	0.98965
74 75	0.98348 0.98514	0.98295 0.98467	0.98308 0.98477	0.98280 0.98421	0.98292 0.98403	0.98268 0.98352	0.98362 0.98399	0.98492 0.98482	0.98648 0.98600	0.98802 0.98731	0.98922 0.98856
76	0.98720	0.98682	0.98689	0.98601	0.98548	0.98470	0.98479	0.98515	0.98586	0.98682	0.98788
77	0.98948	0.98927	0.98929	0.98815	0.98726	0.98613	0.98585	0.98582	0.98608	0.98661	0.98738
78	0.99188	0.99188	0.99186	0.99052	0.98930	0.98781	0.98711	0.98670	0.98657	0.98671	0.98712
79 80	0.99432 0.99665	0.99454 0.99709	0.99447 0.99697	0.99299 0.99543	0.99151 0.99374	0.98969 0.99165	0.98854 0.99014	0.98772 0.98888	0.98724 0.98802	0.98703 0.98750	0.98712 0.98732
81	0.99876	0.99941	0.99925	0.99771	0.99592	0.99360	0.99179	0.99019	0.98892	0.98808	0.98765
82	1.00062	1.00148	1.00130	0.99977	0.99794	0.99549	0.99345	0.99156	0.98998	0.98877	0.98809
83	1.00225	1.00332	1.00310	1.00161	0.99976	0.99724	0.99506	0.99295	0.99111	0.98963	0.98864
84 85	1.00380	1.00499 1.00656	1.00475 1.00629	1.00326 1.00478	1.00141 1.00290	0.99884 1.00028	0.99658 0.99796	0.99432 0.99562	0.99228 0.99344	0.99058 0.99156	0.98936 0.99016
85 86	1.00535 1.00687	1.00815	1.00629	1.00478	1.00433	1.00163	0.99796	0.99687	0.99344	0.99263	0.99107
87	1.00836	1.00972	1.00940	1.00776	1.00571	1.00290	1.00047	0.99802	0.99570	0.99364	0.99199
88	1.00976	1.01123	1.01089	1.00921	1.00708	1.00409	1.00158	0.99905	0.99668	0.99457	0.99287
89 90	1.01104 1.01222	1.01267 1.01400	1.01231	1.01060 1.01191	1.00841 1.00967	1.00525	1.00261 1.00361	0.99999 1.00087	0.99756 0.99836	0.99541 0.99616	0.99367 0.99440
90 91	1.01222	1.01523	1.01362 1.01483	1.01313	1.01086	1.00637 1.00743	1.00361	1.00067	0.99911	0.99685	0.99505
92	1.01442	1.01640	1.01598	1.01426	1.01197	1.00843	1.00552	1.00259	0.99987	0.99751	0.99567
93	1.01547	1.01753	1.01709	1.01535	1.01302	1.00939	1.00643	1.00342	1.00063	0.99818	0.99626
94 95	1.01652 1.01757	1.01863 1.01974	1.01818 1.01927	1.01640 1.01745	1.01403 1.01502	1.01031 1.01120	1.00730 1.00813	1.00423 1.00501	1.00137 1.00209	0.99885 0.99951	0.99686 0.99746
95 96	1.01757	1.01974	1.01927	1.01745	1.01502	1.01120	1.00813	1.00501	1.00209	1.00028	0.99819
97	1.01970	1.02197	1.02148	1.01958	1.01706	1.01307	1.00988	1.00666	1.00366	1.00101	0.99889
98	1.02077	1.02308	1.02257	1.02064	1.01806	1.01399	1.01074	1.00745	1.00440	1.00171	0.99957
99	1.02183	1.02419	1.02367	1.02170	1.01907	1.01489	1.01159	1.00823	1.00512	1.00238	1.00021
100 101	1.02047 1.01910	1.02268 1.02116	1.02219 1.02071	1.02158 1.02019	1.01904 1.01901	1.01495 1.01497	1.01175 1.01190	1.00855 1.00880	1.00555 1.00596	1.00290 1.00340	1.00079 1.00135
102	1.01774	1.01965	1.01923	1.01880	1.01776	1.01498	1.01203	1.00904	1.00630	1.00340	1.00189
103	1.01638	1.01814	1.01775	1.01741	1.01650	1.01383	1.01216	1.00929	1.00665	1.00431	1.00244
104	1.01501	1.01663	1.01627	1.01602	1.01524	1.01269	1.01120	1.00954	1.00700	1.00474	1.00290
105 106	1.01365 1.01228	1.01512 1.01361	1.01479 1.01331	1.01463 1.01324	1.01399 1.01273	1.01156 1.01044	1.01025 1.00932	1.00878 1.00804	1.00736 1.00680	1.00517 1.00562	1.00337 1.00386
107	1.01092	1.01209	1.01183	1.01324	1.01147	1.00935	1.00932	1.00732	1.00626	1.00502	1.00386
108	1.00955	1.01058	1.01035	1.01046	1.01022	1.00826	1.00750	1.00660	1.00572	1.00487	1.00411
109	1.00819	1.00907	1.00887	1.00907	1.00896	1.00717	1.00659	1.00588	1.00519	1.00449	1.00386
110 111	1.00682 1.00546	1.00756 1.00605	1.00740 1.00592	1.00768 1.00629	1.00770 1.00645	1.00608 1.00640	1.00569 1.00619	1.00516 1.00585	1.00465 1.00542	1.00411 1.00494	1.00362 1.00447
111	1.00546	1.00605	1.00592	1.00629	1.00645	1.00640	1.00528	1.00585	1.00542	1.00494	1.00447
113	1.00273	1.00302	1.00296	1.00351	1.00393	1.00422	1.00437	1.00440	1.00434	1.00418	1.00397
114	1.00136	1.00151	1.00148	1.00212	1.00268	1.00312	1.00346	1.00368	1.00380	1.00381	1.00372
115	1.00000	1.00000	1.00000	1.00073	1.00142	1.00203	1.00255	1.00296	1.00326	1.00343	1.00348
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to:</u> Nondisability Retirees -- Officer [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
< 21 21	0.97173 0.97177	0.97430 0.97433	0.97681 0.97684	0.97921 0.97925	0.98145 0.98149	0.98350 0.98353	0.98529 0.98532	0.98677 0.98680	0.98790 0.98793	0.98863 0.98866	0.98890 0.98893
22	0.97183	0.97433	0.97690	0.97925	0.98155	0.98358	0.98537	0.98685	0.98798	0.98871	0.98897
23	0.97191	0.97447	0.97698	0.97938	0.98162	0.98365	0.98544	0.98692	0.98805	0.98877	0.98904
24	0.97200	0.97455	0.97706	0.97945	0.98169	0.98373	0.98551	0.98699	0.98812	0.98884	0.98910
25	0.97208	0.97464	0.97714	0.97953	0.98177	0.98381	0.98559	0.98707	0.98819	0.98891	0.98917
26 27	0.97216 0.97223	0.97472 0.97478	0.97721 0.97728	0.97960 0.97967	0.98184 0.98190	0.98387 0.98393	0.98565 0.98571	0.98713 0.98719	0.98825 0.98831	0.98897 0.98902	0.98923 0.98929
28	0.97229	0.97478	0.97734	0.97972	0.98196	0.98399	0.98576	0.98724	0.98836	0.98902	0.98933
29	0.97234	0.97489	0.97738	0.97977	0.98200	0.98403	0.98581	0.98728	0.98840	0.98911	0.98937
30	0.97237	0.97492	0.97741	0.97979	0.98203	0.98405	0.98583	0.98730	0.98842	0.98913	0.98939
31	0.97238	0.97493	0.97742	0.97981	0.98204	0.98407	0.98584	0.98731	0.98843	0.98914	0.98940
32	0.97423	0.97493	0.97742	0.97981	0.98204	0.98407	0.98584	0.98731	0.98843	0.98915	0.98940
33 34	0.97617 0.97813	0.97649 0.97815	0.97742 0.97872	0.97981 0.97981	0.98204 0.98204	0.98407 0.98407	0.98584 0.98585	0.98731 0.98732	0.98843 0.98843	0.98914 0.98915	0.98940 0.98941
35	0.97992	0.97981	0.98009	0.98085	0.98204	0.98407	0.98585	0.98732	0.98843	0.98915	0.98941
36	0.98155	0.98135	0.98148	0.98195	0.98285	0.98408	0.98586	0.98733	0.98844	0.98916	0.98942
37	0.98293	0.98276	0.98277	0.98309	0.98372	0.98469	0.98589	0.98736	0.98847	0.98919	0.98944
38	0.98406	0.98397	0.98397	0.98416	0.98462	0.98535	0.98632	0.98741	0.98852	0.98923	0.98949
39 40	0.98499 0.98573	0.98492 0.98573	0.98496 0.98577	0.98512 0.98593	0.98544 0.98619	0.98600 0.98662	0.98677 0.98723	0.98767 0.98796	0.98856 0.98872	0.98927 0.98932	0.98953 0.98958
41	0.98620	0.98633	0.98641	0.98655	0.98679	0.98714	0.98762	0.98822	0.98884	0.98937	0.98959
42	0.98643	0.98673	0.98691	0.98706	0.98727	0.98758	0.98797	0.98845	0.98897	0.98941	0.98961
43	0.98641	0.98693	0.98724	0.98746	0.98767	0.98793	0.98827	0.98866	0.98908	0.98945	0.98962
44	0.98628	0.98693	0.98743	0.98775	0.98800	0.98824	0.98852	0.98886	0.98921	0.98951	0.98966
45	0.98616	0.98683	0.98744	0.98791	0.98823	0.98849	0.98875	0.98903 0.98919	0.98932	0.98957	0.98969
46 47	0.98606 0.98559	0.98676 0.98664	0.98739 0.98731	0.98795 0.98789	0.98839 0.98840	0.98869 0.98879	0.98895 0.98907	0.98930	0.98944 0.98951	0.98965 0.98969	0.98974 0.98977
48	0.98484	0.98622	0.98718	0.98780	0.98832	0.98877	0.98911	0.98936	0.98955	0.98970	0.98977
49	0.98388	0.98555	0.98680	0.98766	0.98822	0.98869	0.98908	0.98935	0.98955	0.98968	0.98974
50	0.98288	0.98471	0.98622	0.98734	0.98810	0.98860	0.98900	0.98931	0.98952	0.98965	0.98971
51	0.98191	0.98385	0.98552	0.98687	0.98784	0.98850	0.98892	0.98925	0.98948	0.98962	0.98967
52 53	0.98088 0.97991	0.98303 0.98215	0.98482 0.98412	0.98631 0.98573	0.98749 0.98704	0.98831 0.98804	0.98885 0.98871	0.98920 0.98914	0.98944 0.98939	0.98959 0.98955	0.98964 0.98960
54	0.97903	0.98130	0.98337	0.98516	0.98657	0.98769	0.98850	0.98902	0.98933	0.98949	0.98955
55	0.97830	0.98054	0.98266	0.98454	0.98612	0.98733	0.98825	0.98888	0.98925	0.98944	0.98950
56	0.97774	0.97991	0.98202	0.98396	0.98563	0.98699	0.98799	0.98871	0.98915	0.98938	0.98945
57	0.97737	0.97942	0.98148	0.98342	0.98516	0.98661	0.98774	0.98853	0.98904	0.98930	0.98939
58	0.97711	0.97911	0.98108	0.98300	0.98475	0.98627	0.98748	0.98836	0.98893	0.98924	0.98934
59 60	0.97695 0.97705	0.97891 0.97878	0.98083 0.98068	0.98269 0.98250	0.98444 0.98420	0.98598 0.98576	0.98726 0.98707	0.98821 0.98808	0.98885 0.98878	0.98920 0.98917	0.98931 0.98930
61	0.97736	0.97887	0.98058	0.98238	0.98407	0.98559	0.98692	0.98797	0.98872	0.98915	0.98929
62	0.97797	0.97915	0.98066	0.98231	0.98398	0.98550	0.98682	0.98789	0.98867	0.98913	0.98929
63	0.97874	0.97966	0.98089	0.98237	0.98392	0.98544	0.98675	0.98783	0.98863	0.98912	0.98929
64	0.97973	0.98032	0.98131	0.98256	0.98397	0.98539	0.98671	0.98779	0.98860	0.98911	0.98928
65 66	0.98084 0.98217	0.98116 0.98212	0.98186 0.98257	0.98290 0.98335	0.98412 0.98439	0.98543 0.98555	0.98669 0.98672	0.98777 0.98777	0.98859 0.98859	0.98910 0.98911	0.98929 0.98930
67	0.98364	0.98325	0.98337	0.98392	0.98474	0.98575	0.98681	0.98780	0.98860	0.98912	0.98931
68	0.98508	0.98452	0.98432	0.98458	0.98520	0.98602	0.98696	0.98786	0.98863	0.98914	0.98933
69	0.98647	0.98575	0.98538	0.98535	0.98571	0.98636	0.98715	0.98797	0.98868	0.98917	0.98936
70	0.98771	0.98695	0.98642	0.98621	0.98632	0.98675	0.98740	0.98810	0.98875	0.98921	0.98940
71	0.98872	0.98801	0.98742	0.98706	0.98699	0.98721	0.98767	0.98826	0.98883	0.98926	0.98944
72 73	0.98948 0.98984	0.98888 0.98954	0.98831 0.98904	0.98787 0.98860	0.98766 0.98830	0.98771 0.98821	0.98799 0.98835	0.98845 0.98865	0.98894 0.98905	0.98932 0.98938	0.98948 0.98953
74	0.98980	0.98986	0.98960	0.98919	0.98887	0.98869	0.98870	0.98888	0.98917	0.98945	0.98958
75	0.98943	0.98983	0.98987	0.98965	0.98933	0.98911	0.98903	0.98911	0.98930	0.98952	0.98962
76	0.98884	0.98952	0.98984	0.98986	0.98968	0.98945	0.98932	0.98931	0.98942	0.98958	0.98966
77	0.98823	0.98903	0.98960	0.98984	0.98985	0.98971	0.98955	0.98949	0.98953	0.98963	0.98970
78 79	0.98777 0.98752	0.98852 0.98813	0.98920 0.98879	0.98966 0.98935	0.98984 0.98971	0.98984 0.98982	0.98973 0.98981	0.98964 0.98974	0.98963	0.98968 0.98972	0.98972 0.98974
80	0.98748	0.98792	0.98848	0.98903	0.98949	0.98975	0.98981	0.98979	0.98970 0.98975	0.98974	0.98975
81	0.98763	0.98790	0.98831	0.98880	0.98926	0.98961	0.98978	0.98979	0.98978	0.98976	0.98976
82	0.98790	0.98803	0.98830	0.98867	0.98909	0.98946	0.98971	0.98980	0.98977	0.98976	0.98976
83	0.98825	0.98826	0.98842	0.98868	0.98901	0.98935	0.98963	0.98979	0.98982	0.98976	0.98976
84	0.98871	0.98857	0.98862	0.98878	0.98902	0.98931	0.98958	0.98977	0.98984	0.98982	0.98975
85 86	0.98934 0.99011	0.98897 0.98960	0.98888 0.98929	0.98895 0.98924	0.98911 0.98933	0.98933 0.98949	0.98957 0.98968	0.98976 0.98985	0.98987 0.98997	0.98987 0.99000	0.98982 0.98995
87	0.99092	0.99029	0.98985	0.98959	0.98957	0.98967	0.98981	0.98996	0.99008	0.99012	0.99008
88	0.99173	0.99101	0.99046	0.99008	0.98986	0.98988	0.98997	0.99009	0.99019	0.99023	0.99020
89	0.99250	0.99173	0.99109	0.99061	0.99030	0.99011	0.99014	0.99023	0.99031	0.99035	0.99032
90	0.99321	0.99242	0.99172	0.99116	0.99076	0.99049	0.99034	0.99037	0.99043	0.99046	0.99043
91 92	0.99386 0.99446	0.99306 0.99365	0.99234 0.99292	0.99172 0.99227	0.99124 0.99173	0.99090 0.99132	0.99067 0.99103	0.99053 0.99083	0.99056 0.99069	0.99058 0.99069	0.99055 0.99066
93	0.99502	0.99421	0.99346	0.99279	0.99221	0.99175	0.99140	0.99065	0.99097	0.99082	0.99078
94	0.99556	0.99473	0.99397	0.99328	0.99268	0.99217	0.99177	0.99148	0.99127	0.99109	0.99091
95	0.99611	0.99524	0.99445	0.99374	0.99312	0.99259	0.99215	0.99182	0.99156	0.99137	0.99118
96	0.99680	0.99589	0.99506	0.99433	0.99368	0.99312	0.99266	0.99229	0.99201	0.99178	0.99159
97	0.99748	0.99654	0.99567	0.99490	0.99422	0.99364	0.99315	0.99276	0.99245	0.99220	0.99200
98 99	0.99814 0.99877	0.99718 0.99779	0.99628 0.99687	0.99547 0.99603	0.99475 0.99528	0.99415 0.99464	0.99364 0.99411	0.99322 0.99366	0.99288 0.99331	0.99262 0.99303	0.99241 0.99282
100	0.99937	0.99839	0.99745	0.99659	0.99581	0.99514	0.99411	0.99411	0.99374	0.99345	0.99322
101	0.99994	0.99894	0.99800	0.99712	0.99632	0.99562	0.99502	0.99453	0.99415	0.99385	0.99362
102	1.00049	0.99948	0.99852	0.99762	0.99681	0.99608	0.99546	0.99495	0.99455	0.99424	0.99400
103	1.00104	1.00001	0.99903	0.99812	0.99729	0.99655	0.99591	0.99538	0.99495	0.99463	0.99440
104	1.00159	1.00054	0.99954	0.99862	0.99777	0.99701	0.99635	0.99580	0.99536	0.99503	0.99479
105 106	1.00205 1.00253	1.00108 1.00151	1.00006 1.00059	0.99911 0.99962	0.99824 0.99873	0.99747 0.99794	0.99680 0.99725	0.99623 0.99667	0.99578 0.99620	0.99543 0.99585	0.99519 0.99560
107	1.00302	1.00196	1.00100	1.00014	0.99923	0.99842	0.99771	0.99712	0.99664	0.99628	0.99603
108	1.00351	1.00241	1.00141	1.00051	0.99973	0.99890	0.99818	0.99757	0.99708	0.99671	0.99645
109	1.00334	1.00286	1.00181	1.00088	1.00006	0.99938	0.99864	0.99801	0.99751	0.99713	0.99688
110	1.00318	1.00275	1.00222	1.00125	1.00039	0.99967	0.99910	0.99846	0.99795	0.99756	0.99730
111	1.00406	1.00365	1.00314 1.00309	1.00256	1.00164 1.00197	1.00087 1.00117	1.00023	0.99975 1.00000	0.99920 0.99964	0.99879 0.99922	0.99851 0.99894
112 113	1.00390 1.00373	1.00354 1.00343	1.00309	1.00256 1.00256	1.00197	1.00117	1.00050 1.00078	1.00000	0.99964	0.99922	0.99894
114	1.00373	1.00343	1.00298	1.00256	1.00202	1.00156	1.00105	1.00024	1.00010	0.99986	0.99979
115	1.00340	1.00321	1.00293	1.00256	1.00212	1.00165	1.00118	1.00073	1.00032	1.00008	1.00000
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS

<u>Applied to:</u> Permanent Disability Retirees -- Enlisted [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age < 21	2013 0.93518	2014 0.92268	2015 0.92387	2016 0.92712	2017 0.93200	2018 0.93617	2019 0.94290	2020 0.94988	2021 0.95679	2022 0.96306	2023 0.96820
< 21 21	0.93518	0.92268	0.92387	0.92712	0.93200	0.93617	0.94290	0.94988	0.95679	0.96306	0.96825
22	0.93518	0.92268	0.92387	0.92712	0.93200	0.93630	0.94303	0.95001	0.95692	0.96317	0.96831
23	0.94025	0.93004	0.93109	0.93042	0.93488	0.93879	0.94497	0.95141	0.95781	0.96364	0.96850
24	0.94536	0.93783	0.93875	0.93748	0.93793	0.94142	0.94703	0.95289	0.95875	0.96414	0.96870
25 26	0.95030 0.95475	0.94564 0.95283	0.94642 0.95349	0.94477 0.95179	0.94445 0.95093	0.94406 0.94978	0.94909 0.95099	0.95438 0.95574	0.95970 0.96057	0.96465 0.96511	0.96890 0.96908
27	0.95829	0.95932	0.95986	0.95819	0.95714	0.95545	0.95580	0.95698	0.96136	0.96553	0.96924
28	0.96031	0.96469	0.96513	0.96375	0.96262	0.96077	0.96050	0.96088	0.96201	0.96588	0.96938
29	0.96149	0.96895	0.96932	0.96827	0.96734	0.96543	0.96492	0.96475	0.96517	0.96615	0.96949
30	0.96229	0.97246	0.97277	0.97191	0.97124	0.96950	0.96887	0.96846	0.96838	0.96875	0.96957
31 32	0.96247 0.96150	0.97519 0.97696	0.97545 0.97719	0.97484 0.97696	0.97431 0.97665	0.97281 0.97529	0.97230 0.97501	0.97177 0.97463	0.97150 0.97427	0.97143 0.97405	0.97174 0.97400
33	0.96005	0.97782	0.97803	0.97820	0.97827	0.97714	0.97702	0.97688	0.97669	0.97642	0.97626
34	0.95871	0.97765	0.97786	0.97855	0.97903	0.97831	0.97846	0.97852	0.97860	0.97852	0.97832
35	0.95773	0.97697	0.97720	0.97816	0.97917	0.97888	0.97944	0.97978	0.98006	0.98022	0.98017
36	0.95701	0.97631	0.97655	0.97754	0.97883	0.97907	0.98004	0.98075	0.98126	0.98158	0.98172
37 38	0.95665 0.95626	0.97559 0.97359	0.97584 0.97388	0.97689 0.97565	0.97823 0.97714	0.97881 0.97794	0.98027 0.97978	0.98136 0.98143	0.98221 0.98270	0.98272 0.98357	0.98297 0.98402
39	0.95513	0.97060	0.97094	0.97334	0.97563	0.97675	0.97882	0.98091	0.98275	0.98405	0.98482
40	0.95338	0.96688	0.96729	0.97022	0.97323	0.97530	0.97770	0.98007	0.98237	0.98421	0.98533
41	0.95126	0.96306	0.96354	0.96670	0.97033	0.97321	0.97647	0.97917	0.98174	0.98398	0.98555
42 43	0.94888 0.94630	0.95939 0.95544	0.95993 0.95605	0.96320 0.95964	0.96715 0.96380	0.97071 0.96779	0.97474 0.97251	0.97827 0.97682	0.98114 0.98047	0.98359 0.98320	0.98548 0.98525
44	0.94389	0.95175	0.95242	0.95607	0.96063	0.96494	0.97008	0.97505	0.97941	0.98282	0.98505
45	0.94212	0.94848	0.94921	0.95281	0.95750	0.96230	0.96771	0.97308	0.97804	0.98205	0.98484
46	0.94109	0.94585	0.94662	0.95004	0.95473	0.95977	0.96560	0.97122	0.97651	0.98103	0.98431
47 48	0.94061 0.94084	0.94387 0.94269	0.94469 0.94353	0.94788 0.94639	0.95242 0.95072	0.95752 0.95567	0.96348 0.96163	0.96948 0.96772	0.97497 0.97352	0.97976 0.97846	0.98346 0.98237
49	0.94165	0.94192	0.94277	0.94547	0.94949	0.95420	0.96002	0.96610	0.97198	0.97720	0.98123
50	0.94298	0.94142	0.94228	0.94487	0.94874	0.95309	0.95872	0.96466	0.97054	0.97583	0.98012
51	0.94476	0.94189	0.94273	0.94484	0.94856	0.95264	0.95794	0.96364	0.96935	0.97460	0.97893
52	0.94754	0.94322	0.94404	0.94566	0.94885	0.95268	0.95772	0.96306	0.96850	0.97357	0.97785
53 54	0.95112 0.95517	0.94564 0.94874	0.94642 0.94947	0.94739 0.94996	0.95002 0.95186	0.95318 0.95431	0.95794 0.95842	0.96296 0.96312	0.96800 0.96783	0.97279 0.97224	0.97690 0.97612
55	0.95984	0.95270	0.95336	0.95324	0.95455	0.95610	0.95951	0.96353	0.96790	0.97199	0.97553
56	0.96510	0.95715	0.95773	0.95716	0.95775	0.95853	0.96110	0.96440	0.96811	0.97189	0.97519
57	0.97062	0.96240	0.96289	0.96167	0.96166	0.96151	0.96332	0.96574	0.96875	0.97191	0.97495
58 59	0.97596 0.98106	0.96822 0.97387	0.96860 0.97415	0.96683 0.97219	0.96603 0.97071	0.96509 0.96886	0.96600 0.96903	0.96763 0.96979	0.96978 0.97121	0.97229 0.97297	0.97483 0.97500
60	0.98522	0.97930	0.97949	0.97737	0.97558	0.90000	0.97223	0.96979	0.97121	0.97402	0.97544
61	0.98846	0.98405	0.98415	0.98213	0.98009	0.97706	0.97561	0.97482	0.97480	0.97525	0.97619
62	0.99050	0.98787	0.98791	0.98616	0.98414	0.98082	0.97902	0.97755	0.97681	0.97673	0.97713
63	0.99143	0.99069	0.99068	0.98928	0.98747	0.98416	0.98210	0.98032	0.97899	0.97831	0.97830
64 65	0.99119 0.98958	0.99190 0.99148	0.99187 0.99145	0.99119 0.99159	0.98975 0.99090	0.98667 0.98825	0.98469 0.98659	0.98274 0.98480	0.98120 0.98319	0.98007 0.98194	0.97959 0.98110
66	0.98715	0.98957	0.98958	0.99053	0.99073	0.98891	0.98774	0.98634	0.98495	0.98368	0.98275
67	0.98481	0.98685	0.98690	0.98838	0.98946	0.98860	0.98827	0.98738	0.98638	0.98532	0.98436
68	0.98281	0.98409	0.98420	0.98582	0.98749	0.98756	0.98813	0.98804	0.98749	0.98675	0.98591
69 70	0.98136 0.98071	0.98197 0.98069	0.98211 0.98086	0.98353 0.98193	0.98538 0.98359	0.98608 0.98452	0.98748 0.98643	0.98819 0.98787	0.98832 0.98868	0.98792 0.98882	0.98728 0.98842
71	0.98071	0.98034	0.98052	0.98116	0.98246	0.98325	0.98528	0.98715	0.98856	0.98926	0.98928
72	0.98121	0.98075	0.98092	0.98118	0.98203	0.98252	0.98431	0.98625	0.98801	0.98921	0.98969
73	0.98218	0.98166	0.98181	0.98178	0.98222	0.98233	0.98373	0.98542	0.98723	0.98873	0.98965
74	0.98348	0.98295	0.98308	0.98280	0.98292	0.98268	0.98362	0.98492	0.98648	0.98802	0.98922
75 76	0.98514 0.98720	0.98467 0.98682	0.98477 0.98689	0.98421 0.98601	0.98403 0.98548	0.98352 0.98470	0.98399 0.98479	0.98482 0.98515	0.98600 0.98586	0.98731 0.98682	0.98856 0.98788
77	0.98948	0.98927	0.98929	0.98815	0.98726	0.98613	0.98585	0.98582	0.98608	0.98661	0.98738
78	0.99188	0.99188	0.99186	0.99052	0.98930	0.98781	0.98711	0.98670	0.98657	0.98671	0.98712
79	0.99432	0.99454	0.99447	0.99299	0.99151	0.98969	0.98854	0.98772	0.98724	0.98703	0.98712
80 81	0.99665 0.99876	0.99709 0.99941	0.99697 0.99925	0.99543 0.99771	0.99374 0.99592	0.99165 0.99360	0.99014 0.99179	0.98888 0.99019	0.98802 0.98892	0.98750 0.98808	0.98732 0.98765
82	1.00062	1.00148	1.00130	0.99977	0.99794	0.99549	0.99345	0.99156	0.98998	0.98877	0.98809
83	1.00225	1.00332	1.00310	1.00161	0.99976	0.99724	0.99506	0.99295	0.99111	0.98963	0.98864
84	1.00380	1.00499	1.00475	1.00326	1.00141	0.99884	0.99658	0.99432	0.99228	0.99058	0.98936
85	1.00535	1.00656	1.00629	1.00478	1.00290	1.00028	0.99796	0.99562	0.99344	0.99156	0.99016
86 87	1.00687 1.00836	1.00815 1.00972	1.00785 1.00940	1.00627 1.00776	1.00433 1.00571	1.00163 1.00290	0.99927 1.00047	0.99687 0.99802	0.99462 0.99570	0.99263 0.99364	0.99107 0.99199
88	1.00976	1.01123	1.01089	1.00921	1.00708	1.00409	1.00158	0.99905	0.99668	0.99457	0.99287
89	1.01104	1.01267	1.01231	1.01060	1.00841	1.00525	1.00261	0.99999	0.99756	0.99541	0.99367
90	1.01222	1.01400	1.01362	1.01191	1.00967	1.00637	1.00361	1.00087	0.99836	0.99616	0.99440
91 92	1.01334 1.01442	1.01523 1.01640	1.01483 1.01598	1.01313 1.01426	1.01086 1.01197	1.00743 1.00843	1.00459 1.00552	1.00173 1.00259	0.99911 0.99987	0.99685 0.99751	0.99505 0.99567
93	1.01547	1.01753	1.01709	1.01535	1.01302	1.00939	1.00643	1.00342	1.00063	0.99818	0.99626
94	1.01652	1.01863	1.01818	1.01640	1.01403	1.01031	1.00730	1.00423	1.00137	0.99885	0.99686
95	1.01757	1.01974	1.01927	1.01745	1.01502	1.01120	1.00813	1.00501	1.00209	0.99951	0.99746
96 97	1.01864 1.01970	1.02085 1.02197	1.02037 1.02148	1.01851 1.01958	1.01604 1.01706	1.01214 1.01307	1.00901 1.00988	1.00584 1.00666	1.00289 1.00366	1.00028 1.00101	0.99819 0.99889
98	1.02077	1.02308	1.02257	1.02064	1.01806	1.01399	1.01074	1.00745	1.00440	1.00171	0.99957
99	1.02183	1.02419	1.02367	1.02170	1.01907	1.01489	1.01159	1.00823	1.00512	1.00238	1.00021
100	1.02047	1.02268	1.02219	1.02158	1.01904	1.01495	1.01175	1.00855	1.00555	1.00290	1.00079
101 102	1.01910 1.01774	1.02116 1.01965	1.02071 1.01923	1.02019 1.01880	1.01901 1.01776	1.01497 1.01498	1.01190 1.01203	1.00880 1.00904	1.00596 1.00630	1.00340 1.00389	1.00135 1.00189
102	1.01638	1.01814	1.01923	1.01741	1.01650	1.01383	1.01203	1.00904	1.00630	1.00369	1.00189
104	1.01501	1.01663	1.01627	1.01602	1.01524	1.01269	1.01120	1.00954	1.00700	1.00474	1.00290
105	1.01365	1.01512	1.01479	1.01463	1.01399	1.01156	1.01025	1.00878	1.00736	1.00517	1.00337
106	1.01228	1.01361	1.01331	1.01324	1.01273	1.01044	1.00932	1.00804	1.00680	1.00562	1.00386
107 108	1.01092 1.00955	1.01209 1.01058	1.01183 1.01035	1.01185 1.01046	1.01147 1.01022	1.00935 1.00826	1.00841 1.00750	1.00732 1.00660	1.00626 1.00572	1.00525 1.00487	1.00436 1.00411
109	1.00819	1.00907	1.00887	1.00907	1.00896	1.00717	1.00659	1.00588	1.00572	1.00449	1.00386
110	1.00682	1.00756	1.00740	1.00768	1.00770	1.00608	1.00569	1.00516	1.00465	1.00411	1.00362
111	1.00546	1.00605	1.00592	1.00629	1.00645	1.00640	1.00619	1.00585	1.00542	1.00494	1.00447
112	1.00409	1.00454	1.00444	1.00490	1.00519 1.00393	1.00531	1.00528	1.00513 1.00440	1.00488	1.00456 1.00418	1.00422
113 114	1.00273 1.00136	1.00302 1.00151	1.00296 1.00148	1.00351 1.00212	1.00393	1.00422 1.00312	1.00437 1.00346	1.00440	1.00434 1.00380	1.00418	1.00397 1.00372
115	1.00000	1.00000	1.00000	1.00073	1.00142	1.00203	1.00255	1.00296	1.00326	1.00343	1.00348
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to:</u> Permanent Disability Retirees -- Enlisted [Factors only shown through 2034.]

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

10							Projection Year					
1.0 1.0 1.7 1.0 1.							2029					
1.0 1.0												
2.1												
24 0.077280 0.07745 0.07745 0.07745 0.08167 0.												
2.0 0.27216 0.27216 0.27727 0.27727 0.27727 0.2772 0.27727		0.97200		0.97706	0.97945					0.98812	0.98884	0.98910
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107 1.00302 1.00196 1.00100 1.00014 0.99923 0.99842 0.99771 0.99712 0.99664 0.99628 0.99603 108 1.00351 1.00241 1.00141 1.00051 0.99973 0.99890 0.99818 0.99757 0.99708 0.99671 0.99645 109 1.00334 1.00286 1.00181 1.00006 0.99938 0.99864 0.99801 0.99751 0.99713 0.99688 110 1.00318 1.00275 1.00222 1.0125 1.00039 0.99967 0.99910 0.99864 0.99755 0.99756 0.99730 111 1.00466 1.00355 1.00314 1.00256 1.00164 1.00087 1.00023 0.99975 0.99920 0.99879 0.99851 112 1.00390 1.00354 1.00399 1.00256 1.00177 1.00117 1.00050 1.00000 0.99987 0.99986 0.99996 0.99986 0.99979 0.99867 0.99986 0.99979 0.99879 0.99879 0.9												
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112 1.00390 1.00354 1.00309 1.00256 1.00197 1.00117 1.00050 1.00000 0.99964 0.99922 0.99894 113 1.00373 1.00343 1.00330 1.00256 1.00207 1.00166 1.00105 1.00049 1.00010 0.99987 0.99965 0.99979 114 1.00357 1.00332 1.00298 1.00207 1.00166 1.00105 1.00049 1.00010 0.99986 0.99979 115 1.00340 1.00321 1.00293 1.00256 1.00212 1.00165 1.00118 1.00073 1.00032 1.00008 1.00000												
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>115 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000 1.00000		1.00340	1.00321	1.00293	1.00256	1.00212	1.00165	1.00118	1.00073	1.00032	1.00008	1.00000
	> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS

<u>Applied to</u>: Surviving Spouses, and Current Spouses

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
< 21 21	0.99703 0.99703	0.99322 0.99322	0.99316 0.99316	0.99301 0.99301	0.99277 0.99277	0.99249 0.99249	0.99216 0.99216	0.99183 0.99183	0.99150 0.99150	0.99121 0.99121	0.99097 0.99097
22	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
23	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
24	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
25	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
26	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
27	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
28 29	0.99703 0.99703	0.99322 0.99322	0.99316 0.99316	0.99301 0.99301	0.99277 0.99277	0.99249 0.99249	0.99216 0.99216	0.99183 0.99183	0.99150 0.99150	0.99121 0.99121	0.99097 0.99097
30	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
31	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
32	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
33	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
34	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
35	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
36 37	0.99703 0.99703	0.99322 0.99322	0.99316 0.99316	0.99301 0.99301	0.99277 0.99277	0.99249 0.99249	0.99216 0.99216	0.99183 0.99183	0.99150 0.99150	0.99121 0.99121	0.99097 0.99097
38	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
39	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
40	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
41	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
42	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
43	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
44 45	0.99703 0.99703	0.99322 0.99322	0.99316 0.99316	0.99301 0.99301	0.99277 0.99277	0.99249 0.99249	0.99216 0.99216	0.99183 0.99183	0.99150 0.99150	0.99121 0.99121	0.99097 0.99097
46	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
47	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
48	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
49	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
50	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
51	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
52 53	0.99703 0.99703	0.99322 0.99322	0.99316 0.99316	0.99301 0.99301	0.99277 0.99277	0.99249 0.99249	0.99216 0.99216	0.99183 0.99183	0.99150 0.99150	0.99121 0.99121	0.99097 0.99097
54	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
55	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
56	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
57	0.99703	0.99322	0.99316	0.99301	0.99277	0.99249	0.99216	0.99183	0.99150	0.99121	0.99097
58	0.99535	0.99176	0.99173	0.99236	0.99220	0.99201	0.99180	0.99157	0.99135	0.99114	0.99095
59	0.99378	0.99032 0.98887	0.99031 0.98889	0.99100 0.98965	0.99164 0.99039	0.99155 0.99108	0.99144 0.99108	0.99132 0.99106	0.99119	0.99106	0.99093
60 61	0.99220 0.99088	0.98745	0.98749	0.98831	0.98915	0.98996	0.99072	0.99081	0.99103 0.99088	0.99098 0.99091	0.99091 0.99089
62	0.98978	0.98627	0.98633	0.98709	0.98801	0.98893	0.98981	0.99061	0.99075	0.99085	0.99087
63	0.98880	0.98529	0.98537	0.98608	0.98696	0.98797	0.98896	0.98986	0.99065	0.99080	0.99086
64	0.98799	0.98446	0.98455	0.98523	0.98607	0.98706	0.98814	0.98915	0.99003	0.99076	0.99085
65	0.98746	0.98393	0.98403	0.98458	0.98541	0.98636	0.98741	0.98849	0.98946	0.99026	0.99084
66	0.98730	0.98376	0.98387	0.98425	0.98495	0.98587	0.98687	0.98790	0.98892	0.98978	0.99042
67 68	0.98738 0.98747	0.98405 0.98462	0.98416 0.98472	0.98431 0.98470	0.98481 0.98497	0.98559 0.98554	0.98653 0.98632	0.98749 0.98721	0.98844 0.98808	0.98933 0.98889	0.99001 0.98960
69	0.98764	0.98533	0.98541	0.98530	0.98538	0.98570	0.98627	0.98700	0.98780	0.98855	0.98920
70	0.98786	0.98610	0.98618	0.98599	0.98596	0.98609	0.98641	0.98693	0.98759	0.98827	0.98887
71	0.98822	0.98698	0.98703	0.98676	0.98664	0.98663	0.98676	0.98704	0.98749	0.98805	0.98860
72	0.98866	0.98779	0.98783	0.98755	0.98733	0.98722	0.98721	0.98731	0.98754	0.98792	0.98838
73	0.98914	0.98852	0.98855	0.98828	0.98803	0.98782	0.98771	0.98768	0.98775	0.98793	0.98823
74 75	0.98946	0.98915 0.98966	0.98917 0.98968	0.98892 0.98946	0.98866 0.98921	0.98842	0.98820 0.98871	0.98809	0.98804 0.98837	0.98808 0.98832	0.98823 0.98835
76	0.98980 0.99026	0.99010	0.99011	0.98990	0.98968	0.98895 0.98943	0.98917	0.98849 0.98893	0.98872	0.98860	0.98855
77	0.99091	0.99068	0.99067	0.99038	0.99015	0.98991	0.98964	0.98936	0.98911	0.98891	0.98880
78	0.99167	0.99144	0.99142	0.99100	0.99067	0.99039	0.99011	0.98980	0.98951	0.98925	0.98906
79	0.99241	0.99240	0.99237	0.99181	0.99133	0.99092	0.99057	0.99024	0.98990	0.98959	0.98936
80	0.99324	0.99351	0.99346	0.99278	0.99213	0.99156	0.99107	0.99065	0.99026	0.98991	0.98964
81	0.99421	0.99469	0.99462	0.99386	0.99306	0.99231	0.99164	0.99107	0.99060	0.99021	0.98990
82 83	0.99521 0.99620	0.99588 0.99696	0.99579 0.99686	0.99497 0.99604	0.99406 0.99506	0.99314 0.99401	0.99229 0.99300	0.99155 0.99209	0.99094 0.99133	0.99046 0.99073	0.99013 0.99032
84	0.99716	0.99797	0.99785	0.99702	0.99602	0.99490	0.99375	0.99269	0.99177	0.99105	0.99055
85	0.99804	0.99884	0.99870	0.99791	0.99688	0.99573	0.99451	0.99332	0.99227	0.99141	0.99082
86	0.99882	0.99958	0.99943	0.99867	0.99768	0.99650	0.99526	0.99401	0.99286	0.99191	0.99121
87	0.99942	1.00007	0.99992	0.99927	0.99831	0.99716	0.99591	0.99466	0.99346	0.99243	0.99166
88 89	0.99984 1.00003	1.00032 1.00025	1.00017 1.00011	0.99963 0.99974	0.99878 0.99902	0.99768 0.99804	0.99647 0.99689	0.99522 0.99570	0.99403 0.99453	0.99297 0.99349	0.99214 0.99264
90	0.99997	1.00023	0.99989	0.99962	0.99907	0.99824	0.99722	0.99609	0.99499	0.99397	0.99315
91	0.99966	0.99963	0.99951	0.99935	0.99892	0.99827	0.99740	0.99641	0.99538	0.99442	0.99361
92	0.99922	0.99912	0.99900	0.99894	0.99863	0.99812	0.99744	0.99661	0.99571	0.99482	0.99406
93	0.99871	0.99849	0.99839	0.99842	0.99823	0.99786	0.99733	0.99669	0.99593	0.99517	0.99446
94	0.99811	0.99781	0.99773	0.99783	0.99775	0.99752	0.99714	0.99664	0.99607	0.99544	0.99483
95	0.99747 0.99684	0.99714 0.99648	0.99707 0.99643	0.99721 0.99661	0.99723 0.99671	0.99711 0.99672	0.99687 0.99663	0.99652 0.99644	0.99609 0.99617	0.99562 0.99583	0.99513 0.99549
96 97	0.99623	0.99585	0.99582	0.99603	0.99620	0.99631	0.99635	0.99631	0.99618	0.99599	0.99575
98	0.99563	0.99523	0.99521	0.99547	0.99570	0.99590	0.99605	0.99614	0.99616	0.99610	0.99598
99	0.99503	0.99461	0.99461	0.99491	0.99520	0.99548	0.99574	0.99594	0.99609	0.99616	0.99615
100	0.99443	0.99399	0.99401	0.99435	0.99471	0.99507	0.99542	0.99576	0.99601	0.99619	0.99629
101	0.99480	0.99439	0.99441	0.99426	0.99463	0.99500	0.99536	0.99571	0.99603	0.99626	0.99642
102 103	0.99517 0.99554	0.99479 0.99519	0.99481 0.99520	0.99465 0.99505	0.99454 0.99493	0.99492 0.99485	0.99530 0.99525	0.99567 0.99563	0.99601 0.99599	0.99633 0.99633	0.99652 0.99663
104	0.99591	0.99559	0.99560	0.99545	0.99532	0.99524	0.99519	0.99560	0.99598	0.99633	0.99666
105	0.99628	0.99599	0.99600	0.99584	0.99571	0.99562	0.99557	0.99556	0.99596	0.99634	0.99669
106	0.99666	0.99639	0.99640	0.99624	0.99610	0.99600	0.99594	0.99593	0.99595	0.99635	0.99672
107	0.99703	0.99679	0.99680	0.99663	0.99649	0.99639	0.99632	0.99629	0.99631	0.99636	0.99675
108	0.99740	0.99720	0.99720	0.99703	0.99689	0.99677	0.99670	0.99666	0.99666	0.99670	0.99679
109 110	0.99777 0.99814	0.99760 0.99800	0.99760 0.99800	0.99743 0.99782	0.99728 0.99767	0.99716 0.99754	0.99707 0.99745	0.99702 0.99739	0.99701 0.99737	0.99704 0.99739	0.99711 0.99744
111	0.99851	0.99840	0.99840	0.99822	0.99806	0.99792	0.99782	0.99775	0.99772	0.99739	0.99777
112	0.99889	0.99880	0.99880	0.99862	0.99845	0.99831	0.99820	0.99812	0.99808	0.99807	0.99810
113	0.99926	0.99920	0.99920	0.99901	0.99884	0.99869	0.99857	0.99848	0.99843	0.99841	0.99842
114	0.99963	0.99960	0.99960	0.99941	0.99923	0.99908	0.99895	0.99885	0.99878	0.99875	0.99875
115	1.00000	1.00000	1.00000	0.99981	0.99962	0.99946	0.99932	0.99921	0.99914	0.99909	0.99908
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

MORTALITY IMPROVEMENT FACTORS (continued)

<u>Applied to</u>: Surviving Spouses, and Current Spouses

<u>Gender Mix</u>: Uses gender-based projection adjustment factors/scales

						Projection Year					
Age < 21	2024	2025	2026	2027	2028	2029	2030	2031 0.99010	2032 0.99005	2033 0.99001	2034+
< 21 21	0.99081 0.99081	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010	0.99005	0.99001	0.99000
22	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
23	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
24	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
25	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
26 27	0.99081 0.99081	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000 0.99000
28	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
29	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
30	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
31	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
32	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
33 34	0.99081 0.99081	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000 0.99000
35	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
36	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
37	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
38	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
39 40	0.99081 0.99081	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000 0.99000
41	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
42	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
43	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
44	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
45	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
46 47	0.99081 0.99081	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000 0.99000
48	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
49	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
50	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
51	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
52 53	0.99081 0.99081	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000
54	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000 0.99000
55	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
56	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
57	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
58	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
59 60	0.99081 0.99081	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000 0.99000
61	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
62	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
63	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
64	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
65	0.99081	0.99068	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
66 67	0.99081 0.99044	0.99068 0.99068	0.99057 0.99057	0.99045 0.99045	0.99035 0.99035	0.99025 0.99025	0.99017 0.99017	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000 0.99000
68	0.99008	0.99037	0.99057	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
69	0.98972	0.99007	0.99031	0.99045	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
70	0.98936	0.98976	0.99006	0.99025	0.99035	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
71	0.98907	0.98946	0.98980	0.99004	0.99019	0.99025	0.99017	0.99010	0.99005	0.99001	0.99000
72 73	0.98882 0.98861	0.98921 0.98900	0.98955 0.98934	0.98984 0.98964	0.99003 0.98988	0.99014 0.99002	0.99017 0.99009	0.99010 0.99010	0.99005 0.99005	0.99001 0.99001	0.99000 0.99000
74	0.98848	0.98882	0.98917	0.98947	0.98972	0.98991	0.99002	0.99005	0.99005	0.99001	0.99000
75	0.98848	0.98871	0.98902	0.98934	0.98960	0.98980	0.98994	0.99001	0.99002	0.99001	0.99000
76	0.98859	0.98872	0.98893	0.98922	0.98949	0.98971	0.98987	0.98997	0.99000	0.99001	0.99000
77	0.98877	0.98882	0.98895	0.98914	0.98940	0.98963	0.98981	0.98992	0.98998	0.99000	0.99000
78 79	0.98898 0.98921	0.98899 0.98918	0.98905 0.98920	0.98918 0.98927	0.98934 0.98939	0.98957 0.98953	0.98976 0.98971	0.98989 0.98986	0.98996 0.98995	0.99000 0.98999	0.99000 0.99000
80	0.98947	0.98939	0.98937	0.98940	0.98948	0.98958	0.98968	0.98983	0.98993	0.98999	0.99000
81	0.98971	0.98962	0.98956	0.98956	0.98960	0.98966	0.98974	0.98982	0.98992	0.98998	0.99000
82	0.98993	0.98983	0.98976	0.98972	0.98973	0.98977	0.98983	0.98988	0.98991	0.98998	0.99000
83	0.99013	0.99003	0.98995	0.98990	0.98987	0.98989	0.98992	0.98996	0.98999	0.98998	0.99000
84	0.99029	0.99021	0.99013	0.99007	0.99003	0.99001	0.99003	0.99005	0.99006	0.99005	0.99000
85 86	0.99051 0.99083	0.99036 0.99065	0.99029 0.99050	0.99022 0.99044	0.99017 0.99039	0.99014 0.99035	0.99013 0.99032	0.99014 0.99031	0.99014 0.99030	0.99013 0.99028	0.99008 0.99023
87	0.99120	0.99097	0.99079	0.99064	0.99059	0.99054	0.99051	0.99048	0.99046	0.99043	0.99038
88	0.99162	0.99133	0.99111	0.99093	0.99078	0.99073	0.99069	0.99065	0.99062	0.99058	0.99053
89	0.99208	0.99173	0.99145	0.99124	0.99107	0.99091	0.99086	0.99082	0.99078	0.99074	0.99068
90	0.99256	0.99216	0.99183	0.99157	0.99137	0.99119	0.99103	0.99098	0.99094	0.99089	0.99083
91 92	0.99304 0.99349	0.99261 0.99306	0.99224 0.99266	0.99194 0.99232	0.99169 0.99204	0.99149 0.99181	0.99132 0.99161	0.99114 0.99143	0.99109 0.99125	0.99104 0.99119	0.99098 0.99113
93	0.99392	0.99349	0.99308	0.99272	0.99240	0.99214	0.99192	0.99172	0.99154	0.99134	0.99128
94	0.99432	0.99390	0.99349	0.99311	0.99277	0.99248	0.99223	0.99202	0.99183	0.99163	0.99143
95	0.99469	0.99428	0.99388	0.99349	0.99314	0.99283	0.99256	0.99233	0.99212	0.99192	0.99171
96	0.99513	0.99477	0.99438	0.99400	0.99363	0.99331	0.99302	0.99277	0.99255	0.99235	0.99214
97	0.99551 0.99581	0.99521 0.99560	0.99486 0.99530	0.99449 0.99495	0.99412 0.99460	0.99379 0.99426	0.99349 0.99394	0.99322 0.99367	0.99299 0.99342	0.99277 0.99320	0.99256 0.99299
98 99	0.99608	0.99592	0.99569	0.99539	0.99505	0.99472	0.99440	0.99411	0.99386	0.99363	0.99341
100	0.99630	0.99621	0.99603	0.99579	0.99549	0.99517	0.99485	0.99456	0.99429	0.99406	0.99384
101	0.99649	0.99646	0.99634	0.99614	0.99589	0.99560	0.99529	0.99499	0.99472	0.99448	0.99426
102	0.99665	0.99668	0.99662	0.99648	0.99627	0.99601	0.99572	0.99543	0.99516	0.99491	0.99469
103	0.99680	0.99689	0.99688	0.99679	0.99662	0.99639	0.99613	0.99586	0.99559	0.99534	0.99511
104 105	0.99695 0.99700	0.99708 0.99727	0.99712 0.99735	0.99708 0.99736	0.99696 0.99728	0.99677 0.99713	0.99653 0.99692	0.99628 0.99669	0.99601 0.99643	0.99576 0.99619	0.99554 0.99596
105	0.99705	0.99727	0.99758	0.99763	0.99759	0.99748	0.99731	0.99009	0.99685	0.99619	0.99639
107	0.99711	0.99742	0.99768	0.99790	0.99790	0.99782	0.99768	0.99749	0.99727	0.99704	0.99681
108	0.99716	0.99750	0.99778	0.99802	0.99820	0.99816	0.99805	0.99789	0.99768	0.99746	0.99724
109	0.99722	0.99758	0.99789	0.99814	0.99835	0.99850	0.99842	0.99828	0.99809	0.99788	0.99766
110	0.99754	0.99766	0.99799	0.99827	0.99849	0.99866	0.99879	0.99867	0.99850	0.99830	0.99809
111 112	0.99785 0.99816	0.99796 0.99825	0.99809 0.99838	0.99839 0.99852	0.99863 0.99878	0.99883 0.99899	0.99897 0.99915	0.99906 0.99926	0.99891 0.99932	0.99872 0.99914	0.99851 0.99894
113	0.99847	0.99855	0.99866	0.99878	0.99893	0.99915	0.99933	0.99945	0.99953	0.99956	0.99936
114	0.99879	0.99885	0.99894	0.99905	0.99918	0.99932	0.99951	0.99964	0.99973	0.99977	0.99979
115	0.99910	0.99915	0.99922	0.99932	0.99944	0.99956	0.99969	0.99984	0.99993	0.99998	1.00000
> 115	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000

APPENDIX K

25 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 8 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 temporary 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 FY 2011 National Defense Authorization Act (P.L. 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. This legislation did not apply to survivor annuitant pay and CRSC, which were included in later legislation. This results in retirees receiving 13 payments in some fiscal years and 11 payments in others, with 12 payments occurring in a typical fiscal year. Annual fiscal year amounts shown in this appendix assume 12 monthly payments each year.
- The following economic assumptions are applied to the projection of basic pay and retired outlays. This table is partially replicated from the Table 8 footnotes in the main text:

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

Fiscal Year	Full COLA	Basic Pay
2019	2.8%	2.6%
2020	1.8	3.1
2021	2.3	3.7
2022	2.3	3.7
2023	2.3	3.7
2024	2.3	3.7
2025	2.3	3.7
2026	2.3	3.7
2027	2.3	3.7
2028	2.75	3.7
2029+	2.75	3.25

ACTIVE DUTY PERSONNEL AND PAY BY FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal	People a	at Year End (Septem	iber 30th)	Dollars During Fiscal Year				
Year	Officers	Enlisted	Total	Officers	Enlisted	Total		
2010	247.060	1 124 650	1 202 510					
2018	247,868	1,134,650	1,382,518	#10 1 22 000	Ф20 201 515	Ø50 222 524		
2019	249,497	1,159,839	1,409,336	\$19,122,009	\$39,201,515	\$58,323,524		
2020	251,576	1,175,521	1,427,097	\$19,906,999	\$41,279,755	\$61,186,754		
2021	252,507	1,185,790	1,438,297	\$20,982,460	\$43,761,960	\$64,744,420		
2022	253,869	1,189,985	1,443,854	\$21,788,367	\$45,571,706	\$67,360,072		
2023	254,967	1,193,663	1,448,630	\$22,640,157	\$47,343,853	\$69,984,010		
2024	255,678	1,197,227	1,452,905	\$23,506,724	\$49,140,567	\$72,647,291		
2025	255,678	1,197,227	1,452,905	\$24,384,247	\$50,977,872	\$75,362,119		
2026	255,678	1,197,227	1,452,905	\$25,281,713	\$52,852,858	\$78,134,572		
2027	255,678	1,197,227	1,452,905	\$26,208,630	\$54,788,547	\$80,997,176		
2028	255,678	1,197,227	1,452,905	\$27,163,348	\$56,814,640	\$83,977,988		
2029	255,678	1,197,227	1,452,905	\$28,030,785	\$58,676,322	\$86,707,108		
2030	255,678	1,197,227	1,452,905	\$28,927,363	\$60,600,794	\$89,528,157		
2031	255,678	1,197,227	1,452,905	\$29,852,716	\$62,579,829	\$92,432,546		
2032	255,678	1,197,227	1,452,905	\$30,811,987	\$64,618,629	\$95,430,616		
2033	255,678	1,197,227	1,452,905	\$31,806,659	\$66,664,163	\$98,470,822		
2034	255,678	1,197,227	1,452,905	\$32,846,957	\$68,731,256	\$101,578,213		
2035	255,678	1,197,227	1,452,905	\$33,938,900	\$70,882,299	\$104,821,198		
2036	255,678	1,197,227	1,452,905	\$35,081,999	\$73,146,835	\$108,228,834		
2037	255,678	1,197,227	1,452,905	\$36,267,526	\$75,510,421	\$111,777,947		
2038	255,678	1,197,227	1,452,905	\$37,484,774	\$77,965,577	\$115,450,352		
2038	233,078	1,197,227	1,432,903	\$37,404,774	\$77,903,377	\$113,430,332		
2039	255,678	1,197,227	1,452,905	\$38,719,612	\$80,470,629	\$119,190,241		
2040	255,678	1,197,227	1,452,905	\$39,959,859	\$83,011,836	\$122,971,695		
2041	255,678	1,197,227	1,452,905	\$41,237,451	\$85,645,605	\$126,883,056		
2042	255,678	1,197,227	1,452,905	\$42,566,190	\$88,384,687	\$130,950,878		
2043	255,678	1,197,227	1,452,905	\$43,933,385	\$91,210,907	\$135,144,291		

NONRETIRED RESERVISTS PERSONNEL AND PAY BY FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal	People at	Year End (Septen	nber 30th)	Dollars During Fiscal Year					
Year	Officers	Enlisted	Total	Officers	Enlisted	Total			
2018	113,659	603,338	716,997						
2019	113,695	617,390	731,085	\$2,282,439	\$5,133,402	\$7,415,841			
2020	116,628	610,995	727,623	\$2,262,437	\$6,626,669	\$9,570,440			
2021	116,118	611,179	727,023	\$2,666,078	\$5,923,527	\$8,589,605			
2022	116,031	611,221	727,252	\$2,776,905	\$6,160,334	\$8,937,239			
2022	116,057	611,574	727,631	\$2,901,168	\$6,392,173	\$9,293,341			
2023	110,037	011,374	727,031	\$2,901,100	\$0,392,173	\$9,293,341			
2024	116,057	611,571	727,628	\$3,025,720	\$6,630,818	\$9,656,538			
2025	116,057	611,571	727,628	\$3,152,164	\$6,877,129	\$10,029,293			
2026	116,057	611,571	727,628	\$3,291,406	\$7,139,038	\$10,430,445			
2027	116,057	611,571	727,628	\$3,436,751	\$7,415,271	\$10,852,022			
2028	116,057	611,571	727,628	\$3,586,978	\$7,703,722	\$11,290,700			
2029	116,057	611,571	727,628	\$3,728,773	\$7,965,901	\$11,694,673			
2030	116,057	611,571	727,628	\$3,877,118	\$8,238,311	\$12,115,429			
2031	116,057	611,571	727,628	\$4,031,014	\$8,519,270	\$12,550,283			
2032	116,057	611,571	727,628	\$4,191,565	\$8,811,119	\$13,002,684			
2033	116,057	611,571	727,628	\$4,352,916	\$9,107,859	\$13,460,774			
2024	116.055	(11.571	727 (20	04.516.550	#0.410.100	012.026.004			
2034	116,057	611,571	727,628	\$4,516,772	\$9,410,122	\$13,926,894			
2035	116,057	611,571	727,628	\$4,691,878	\$9,725,431	\$14,417,309			
2036	116,057	611,571	727,628	\$4,871,811	\$10,048,525	\$14,920,337			
2037	116,057	611,571	727,628	\$5,058,266	\$10,378,261	\$15,436,527			
2038	116,057	611,571	727,628	\$5,251,592	\$10,718,466	\$15,970,058			
2039	116,057	611,571	727,628	\$5,452,947	\$11,069,846	\$16,522,793			
2040	116,057	611,571	727,628	\$5,659,829	\$11,431,117	\$17,090,946			
2041	116,057	611,571	727,628	\$5,867,143	\$11,803,003	\$17,670,145			
2042	116,057	611,571	727,628	\$6,078,635	\$12,187,679	\$18,266,314			
2043	116,057	611,571	727,628	\$6,294,783	\$12,583,735	\$18,878,518			
	,	~, - , -	,	+ · ,- · · , · · · ·	+ ,- ·- , · - +	4-0,0.0,-10			

TOTAL NUMBER OF RETIREES ON SEPTEMBER 30 OF EACH FISCAL YEAR

Fiscal	Nondi	Nondisabled (non-CSB/Redux)			isabled (CSB/Re	edux)		Disabled		Grand
Year	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	Total
2018	519 205	1,284,210	1,802,415	4 279	71,400	75 679	20,563	102,698	123,261	2,001,354
2018	518,205	1,283,994		4,278		75,678		102,698	123,261	
	520,777		1,804,771	4,711	76,437	81,148	20,772			2,013,096
2020	522,235	1,282,900	1,805,136	5,073	80,828	85,902	20,847	109,145	129,992	2,021,030
2021	523,978	1,283,478	1,807,456	5,389	84,536	89,925	20,808	110,637	131,444	2,028,825
2022	525,691	1,284,547	1,810,239	5,687	87,729	93,416	20,833	111,884	132,718	2,036,372
2023	527,619	1,286,003	1,813,622	5,936	90,385	96,321	20,876	113,077	133,954	2,043,897
2024	534,798	1,302,644	1,837,443	6,121	91,925	98,046	20,933	114,213	135,145	2,070,634
2025	536,026	1,302,396	1,838,422	6,263	92,930	99,192	20,999	115,299	136,298	2,073,912
2026	536,786	1,301,637	1,838,424	6,373	93,574	99,947	21,073	116,355	137,428	2,075,798
2027	537,163	1,300,152	1,837,315	6,457	93,940	100,397	21,152	117,383	138,534	2,076,247
2028	536,792	1,297,180	1,833,972	6,522	94,068	100,590	21,234	118,380	139,614	2,074,177
2029	536,011	1,293,352	1,829,363	6,569	94,037	100,606	21,320	119,353	140,673	2,070,641
2030	534,749	1,288,986	1,823,736	6,599	93,842	100,441	21,408	120,307	141,715	2,065,892
2031	532,681	1,282,657	1,815,338	6,616	93,528	100,144	21,497	121,248	142,745	2,058,227
2032	530,168	1,275,576	1,805,743	6,622	93,108	99,730	21,587	122,181	143,768	2,049,241
2033	530,452	1,276,225	1,806,677	6,617	92,590	99,206	21,678	123,125	144,803	2,050,686
2034	527,409	1,269,704	1,797,113	6,601	91,949	98,550	21,769	124,067	145,836	2,041,499
2035	524,192	1,262,303	1,786,496	6,579	91,224	97,802	21,862	124,997	146,858	2,031,156
2036	520,923	1,254,614	1,775,537	6,551	90,415	96,967	21,956	125,907	147,863	2,020,366
2037	517,631	1,246,684	1,764,315	6,519	89,520	96,039	22,053	126,799	148,852	2,009,205
2038	514,542	1,238,558	1,753,099	6,481	88,532	95,013	22,151	127,671	149,822	1,997,935
2039	512,020	1,232,391	1,744,411	6,438	87,445	93,883	22,252	128,546	150,799	1,989,092
2040	509,734	1,226,696	1,736,430	6,389	86,255	92,644	22,357	129,420	151,777	1,980,851
2040	507,368	1,221,109	1,728,477	6,334	84,956	91,290	22,462	130,282	152,744	1,972,511
2041	505,003	1,215,167	1,720,170	6,272	83,543	89,815	22,566	131,133	153,699	1,963,684
2042										
2043	502,702	1,209,475	1,712,177	6,202	82,010	88,212	22,669	131,975	154,644	1,955,033

^{*}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.

**The number of disabled retirees includes excess disability retirees, which are assumed to wind down over the next 2 years, to account for the difference between what the disability rates produce and elevated future expected experience. E.g., there were 2,460 added to disabled retirees in FY 2019.

TOTAL ANNUAL RETIRED PAY FOR EACH FISCAL YEAR

(Dollar Amounts in Thousands)

Fiscal	None	disabled (non-CSB/	(Redux)	N	ondisabled (CSB/Re	edux)		Disabled		Grand
Year	Officers	Enlisted	Total	Officers	Enlisted	Total	Officers	Enlisted	Total	Total
2019	\$24,091,825	\$28,920,645	\$53,012,470	\$187,555	\$1,643,251	\$1,830,807	\$610,136	\$1,225,218	\$1,835,354	\$56,678,631
2020	\$24,778,565	\$29,502,580	\$54,281,145	\$214,034	\$1,802,009	\$2,016,043	\$619,583	\$1,289,693	\$1,909,275	\$58,206,463
2021	\$25,486,450	\$30,161,604	\$55,648,054	\$238,876	\$1,948,548	\$2,187,424	\$628,477	\$1,330,914	\$1,959,392	\$59,794,870
2022	\$26,252,260	\$30,912,161	\$57,164,420	\$263,398	\$2,086,417	\$2,349,815	\$639,736	\$1,369,260	\$2,008,996	\$61,523,232
2023	\$27,045,557	\$31,718,581	\$58,764,138	\$287,339	\$2,216,414	\$2,503,753	\$652,347	\$1,407,151	\$2,059,497	\$63,327,388
2023	\$27,043,337	\$51,710,501	\$50,704,150	\$207,337	\$2,210,414	\$2,505,755	\$052,547	\$1,407,131	\$2,037,477	305,527,566
2024	\$27,967,058	\$32,716,594	\$60,683,652	\$309,023	\$2,331,484	\$2,640,507	\$666,522	\$1,446,449	\$2,112,971	\$65,437,130
2025	\$28,898,727	\$33,731,197	\$62,629,924	\$328,800	\$2,430,997	\$2,759,797	\$682,034	\$1,487,381	\$2,169,415	\$67,559,137
2026	\$29,758,839	\$34,662,186	\$64,421,025	\$347,208	\$2,523,662	\$2,870,869	\$698,778	\$1,530,018	\$2,228,796	\$69,520,691
2027	\$30,629,266	\$35,632,218	\$66,261,485	\$364,998	\$2,612,498	\$2,977,496	\$716,780	\$1,574,602	\$2,291,382	\$71,530,363
2028	\$31,608,539	\$36,742,569	\$68,351,108	\$384,257	\$2,708,232	\$3,092,489	\$738,428	\$1,625,872	\$2,364,300	\$73,807,897
2029	\$32,630,083	\$37,913,873	\$70,543,956	\$404,755	\$2,811,357	\$3,216,112	\$761,993	\$1,680,135	\$2,442,128	\$76,202,196
2030	\$33,664,794	\$39,136,933	\$72,801,727	\$425,986	\$2,928,737	\$3,354,723	\$786,795	\$1,736,032	\$2,522,827	\$78,679,277
2031	\$34,701,633	\$40,375,936	\$75,077,569	\$449,401	\$3,071,095	\$3,520,496	\$812,861	\$1,793,558	\$2,606,419	\$81,204,483
2032	\$35,739,866	\$41,676,861	\$77,416,727	\$474,494	\$3,234,289	\$3,708,783	\$840,036	\$1,852,942	\$2,692,978	\$83,818,489
2033	\$36,859,278	\$43,146,293	\$80,005,571	\$497,416	\$3,396,432	\$3,893,848	\$868,451	\$1,914,743	\$2,783,194	\$86,682,613
2034	\$37,973,796	\$44,574,332	\$82,548,128	\$517,949	\$3,541,971	\$4,059,920	\$898,042	\$1,979,088	\$2,877,130	\$89,485,178
2035	\$39,019,021	\$45,847,597	\$84,866,618	\$535,942	\$3,672,847	\$4,208,789	\$928,908	\$2,045,552	\$2,974,460	\$92,049,867
2036	\$40,067,270	\$47,087,584	\$87,154,854	\$552,262	\$3,793,317	\$4,345,579	\$961,123	\$2,113,642	\$3,074,766	\$94,575,199
2037	\$41,129,106	\$48,369,035	\$89,498,141	\$567,051	\$3,903,253	\$4,470,304	\$994,777	\$2,183,346	\$3,178,123	\$97,146,568
2038	\$42,205,412	\$49,632,722	\$91,838,135	\$580,899	\$4,002,721	\$4,583,620	\$1,030,022	\$2,254,807	\$3,284,829	\$99,706,584
2030	\$42,203,412	ψ ⁴ 2,032,722	Ψ71,030,133	ψ300,077	ψ4,002,721	\$4,505,020	\$1,030,022	Ψ2,234,007	\$3,204,027	\$77,700,504
2039	\$43,323,933	\$51,002,916	\$94,326,848	\$593,542	\$4,093,744	\$4,687,286	\$1,066,860	\$2,328,718	\$3,395,577	\$102,409,712
2040	\$44,472,217	\$52,329,289	\$96,801,507	\$605,333	\$4,177,365	\$4,782,698	\$1,105,487	\$2,405,516	\$3,511,004	\$105,095,209
2041	\$45,633,416	\$53,661,039	\$99,294,455	\$616,206	\$4,252,798	\$4,869,004	\$1,146,064	\$2,484,848	\$3,630,912	\$107,794,371
2042	\$46,807,394	\$54,990,624	\$101,798,018	\$626,448	\$4,321,170	\$4,947,617	\$1,188,394	\$2,566,392	\$3,754,786	\$110,500,421
2043	\$47,998,782	\$56,372,402	\$104,371,184	\$635,478	\$4,378,302	\$5,013,780	\$1,232,358	\$2,650,273	\$3,882,632	\$113,267,596

^{*}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 disabled retiree outlays includes amounts for excess disability retirees, which are assumed to wind down over the next 2 years, to account for the difference between what the disability rates produce and elevated future expected experience. E.g., there were \$20.6 million added to disabled retiree outlays in FY 2019.

RETIREE GAIN STATEMENT

Average Starting Net Retired Pay Before CPI Increase Gains During the Fiscal Year Fiscal Nondisabled (non-CSB/Redux) Nondisabled (CSB/Redux) Disabled Nondisabled (non-CSB/Redux) Nondisabled (CSB/Redux) Disabled Year Officers Enlisted Officers Enlisted Officers Enlisted Officers Enlisted Officers Enlisted Officers Enlisted 2019 15.780 33,345 5.147 745 7.214 \$50.196 \$20,693 \$60.763 \$29,255 \$66,475 \$29.813 368 322 7,249 7,311 \$49,947 \$50,787 \$29,895 \$30,513 \$69,035 \$72,266 2020 14,687 32,914 4,517 736 \$21,971 \$63,307 \$31,318 2021 15,023 34,996 3,849 731 \$22,632 \$65,660 \$33,013 15,073 306 257 3,353 7,386 7,431 \$23,734 \$31,848 \$76,005 \$34,942 15,393 \$74,344 \$33,941 \$80,247 \$37,100 2023 36,609 2,837 724 \$53,124 \$24,940 2024 20,781 52,167 194 1,744 723 7,461 \$49,546 \$23,513 \$82,002 \$40,498 \$85,026 \$39,458 2025 2026 14,980 14,670 35,612 35,309 152 122 1,235 903 722 721 7,482 7,507 \$57,397 \$59,404 \$27,627 \$29,190 \$88,681 \$94,858 \$46,290 \$52,135 \$90,154 \$95,657 \$41,973 \$44,630 2027 14,458 34,734 97 79 658 721 7,523 \$61,746 \$30,315 \$101,192 \$57,428 \$101,674 \$47,460 13,890 458 721 2028 33,368 7,526 \$64,716 \$31,844 \$108,742 \$63,838 \$108,067 \$50,403 2029 32,607 62 722 7,528 \$67,039 \$33,037 \$115,784 \$69,142 \$114,788 \$53,501 2030 13,363 32.035 47 35 26 17 223 723 7,529 \$69,667 \$34,542 \$124,259 \$76,596 \$121,892 \$56,710 12,726 29,987 723 \$72,980 \$36,066 \$132,828 \$82,325 \$129,406 \$59,975 2031 2032 12,430 28,832 107 721 7.535 \$75,361 \$37,394 \$140,226 \$87,898 \$137,141 \$63,314 15,360 35,821 71 721 \$70,730 \$34,532 \$150,727 \$92,471 \$145,342 \$66,777 2034 12,146 28,226 27,259 17 720 719 7,569 7,572 \$78,152 \$38,140 \$38,594 \$167,311 \$102,171 \$154,039 \$70,216 12,062 \$79,532 \$180,452 \$111,031 \$163,042 \$73,405 2035 2036 12,082 27,008 719 7,566 \$80,693 \$39,216 \$193,136 \$117,300 \$172,114 \$76,407 7,559 \$124,070 \$79,515 2037 12,085 26,566 719 \$81,803 \$39,473 \$204,856 \$181,510 2038 12,285 26,274 719 7,545 \$40,104 \$213,028 \$129,486 \$191,025 \$82,604 0 2039 12 794 27 713 0 719 7,552 \$83 267 \$40.158 \$0 \$0 \$200,639 \$85 839 12,957 \$40,744 \$0 \$0 \$0 28,043 7,556 \$84,553 \$0 \$210,804 \$89,197 2040 0 722 \$221,194 \$231,602 2041 12,784 28,023 0 0 722 7,551 \$86,475 \$41,397 \$0 \$0 \$92,501 \$88,401 \$95,875 12,658 27,542 721 7,549 \$42,481 2043 12 574 27 477 720 7 549 \$90,442 \$43,526 \$0 \$0 \$241,390 \$99,537

^{*}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 2024 and FY 2033 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.

^{****}Excess disability retirees used to account for anticipated experience over the next 2 years are not included in this display

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	Total
2018	213,367	169	89,520	52	13,668	4,636	321,412
2019	213,965	202	91,370	43	13,746	4,082	323,408
2020	214,205	241	93,220	37	13,806	3,568	325,078
2021	214,120	287	95,165	31	13,798	3,102	326,504
2022	213,728	341	97,215	27	13,718	2,685	327,714
2023	213,061	404	99,362	23	13,527	2,315	328,692
2024	212,145	478	101,668	19	13,262	1,989	329,561
2025	211,008	562	103,991	16	12,951	1,704	330,233
2026	209,671	660	106,359	14	12,535	1,457	330,696
2027	208,165	773	108,742	12	11,998	1,244	330,933
2028	206,523	902	111,120	10	11,435	1,063	331,051
2029	204,793	1,049	113,472	8	11,009	909	331,238
2030	203,015	1,216	115,769	7	10,613	779	331,397
2031	201,232	1,406	117,980	5	10,246	670	331,537
2032	199,484	1,620	120,076	4	9,951	580	331,709
2033	197,805	1,860	122,069	4	9,749	505	331,982
2034	196,225	2,128	123,870	3	9,624	443	332,279
2035	194,763	2,427	125,483	2	9,543	392	332,589
2036	193,427	2,757	126,877	2	9,493	351	332,876
2037	192,224	3,121	128,034	2	9,453	317	333,108
2038	191,154	3,520	128,937	1	9,438	289	333,282
2039	190,207	3,956	129,574	1	9,429	266	333,358
2040	189,364	4,429	129,941	1	9,419	246	333,303
2041	188,607	4,940	130,039	1	9,407	229	333,102
2042	187,920	5,490	129,877	0	9,395	215	332,746
2043	187,278	6,077	129,471	0	9,380	202	332,224

^{*}This projection includes survivors of members who 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 included with the appropriate survivor category.

^{*****}Survivors of excess disability retirees used to account for anticipated experience over the next 2 years are not included in this display.

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	Total
2019	\$3,104,505	\$1,637	\$766,881	\$402	\$136,467	\$13,209	\$4,023,101
2020	\$3,158,132	\$2,194	\$798,235	\$344	\$141,256	\$11.671	\$4,111,833
2021	\$3,214,574	\$2,872	\$832,693	\$300	\$145,813	\$10,249	\$4,206,501
2022	\$3,274,101	\$3,684	\$871,083	\$262	\$149,931	\$8,973	\$4,308,034
2023	\$3,333,046	\$4,667	\$912,679	\$229	\$153,209	\$7,836	\$4,411,665
2024	\$3,391,466	\$5,846	\$957,855	\$199	\$155,529	\$6,831	\$4,517,726
2025	\$3,449,416	\$7,262	\$1,006,749	\$173	\$157,461	\$5,949	\$4,627,011
2026	\$3,506,791	\$8,960	\$1,058,578	\$150	\$159,153	\$5,181	\$4,738,812
2027	\$3,563,579	\$10,976	\$1,113,572	\$129	\$160,042	\$4,516	\$4,852,814
2028	\$3,632,013	\$13,434	\$1,175,469	\$112	\$160,890	\$3,946	\$4,985,864
2029	\$3,704,803	\$16,404	\$1,242,015	\$96	\$162,780	\$3,465	\$5,129,563
2030	\$3,778,524	\$19,959	\$1,311,887	\$82	\$165,394	\$3,058	\$5,278,903
2031	\$3,853,683	\$24,132	\$1,384,824	\$70	\$168,167	\$2,716	\$5,433,592
2032	\$3,930,961	\$28,964	\$1,460,527	\$60	\$171,365	\$2,432	\$5,594,308
2033	\$4,011,043	\$34,531	\$1,538,854	\$50	\$175,372	\$2,196	\$5,762,047
2034	\$4,094,548	\$40,960	\$1,619,509	\$42	\$180,050	\$2,003	\$5,937,112
2035	\$4,182,188	\$48,327	\$1,701,570	\$35	\$185,128	\$1,845	\$6,119,093
2036	\$4,274,464	\$56,726	\$1,784,844	\$29	\$190,542	\$1,718	\$6,308,323
2037	\$4,371,853	\$66,260	\$1,868,749	\$24	\$196,183	\$1,615	\$6,504,683
2038	\$4,474,810	\$77,064	\$1,952,779	\$20	\$202,174	\$1,532	\$6,708,380
2039	\$4,583,621	\$89,277	\$2,036,501	\$16	\$208,390	\$1,465	\$6,919,271
2040	\$4,698,389	\$103,031	\$2,119,516	\$13	\$214,723	\$1,411	\$7,137,084
2041	\$4,819,084	\$118,479	\$2,201,493	\$11	\$221,173	\$1,366	\$7,361,605
2042	\$4,945,822	\$135,770	\$2,282,197	\$9	\$227,737	\$1,327	\$7,592,862
2043	\$5,078,415	\$155,056	\$2,361,516	\$7	\$234,379	\$1,293	\$7,830,665

^{*}This projection includes survivors of members who 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 benefits are included with the appropriate survivor category.

^{****}Survivors of excess disability retirees used to account for anticipated experience over the next 2 years are not included in this display.

TOTAL PROJECTED BASIC PAY AND RETIRED OUTLAYS

(Dollar Amounts in Thousands)

Fiscal	Total Projected	Total Projected	Retired Outlays
Year	Basic Pay	<u>Outlays</u>	Over Basic Pay
2019	\$65,739,365	\$60,701,731	92.3%
2020	\$70,757,194	\$62,318,296	88.1%
2021	\$73,334,025	\$64,001,370	87.3%
2022	\$76,297,311	\$65,831,266	86.3%
2023	\$79,277,351	\$67,739,053	85.4%
2024	\$82,303,829	\$69,954,855	85.0%
2025	\$85,391,412	\$72,186,148	84.5%
2026	\$88,565,016	\$74,259,503	83.8%
2027	\$91,849,198	\$76,383,177	83.2%
2028	\$95,268,688	\$78,793,761	82.7%
2029	\$98,401,781	\$81,331,759	82.7%
2030	\$101,643,586	\$83,958,180	82.6%
2031	\$104,982,829	\$86,638,076	82.5%
2032	\$108,433,300	\$89,412,797	82.5%
2033	\$111,931,596	\$92,444,660	82.6%
2034	\$115,505,107	\$95,422,290	82.6%
2035	\$119,238,508	\$98,168,961	82.3%
2036	\$123,149,171	\$100,883,522	81.9%
2037	\$127,214,474	\$103,651,251	81.5%
2038	\$131,420,410	\$106,414,964	81.0%
2039	\$135,713,035	\$109,328,983	80.6%
2040	\$140,062,640	\$112,232,293	80.1%
2041	\$144,553,201	\$115,155,976	79.7%
2042	\$149,217,192	\$118,093,283	79.1%
2043	\$154,022,809	\$121,098,261	78.6%

^{*}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.

^{****}Excess disability retirees used to account for anticipated experience over the next 2 years are included in outlays. However, the outlays of their survivors are not included.

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 the applicable financial reporting standards, both private sector and state/local pension plans have been 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.

The market values shown in this appendix can be found in the *Fiscal Year 2018 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: https://comptroller.defense.gov/odcfo/afr2018.aspx.

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: 2018 2017 <u>Assets</u> 1) Investments, at fair market value, in U.S. Government securities:¹ \$831,173 \$784,242 2) Accounts receivable: a) Accrued interest² \$5,471 \$5,141 b) Due from military retirees or their survivors \$129 \$133 c) Intragovernmental \$165 \$0 3) Cash: \$25 \$329 Total Assets (1 + 2 + 3): \$836,963 \$789,845 Accounts payable: \$4,815 \$(254) Total Assets Available for Benefits \$841,778 \$789,591

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, 2018, and September 30, 2017, respectively. Additional adjustment made as a result of FY 2011 National Defense Authorization Act (P.L. 111-383), as amended, regarding retired pay date as follows:

	<u>2018</u>	<u>2017</u>
Investments, at fair market value (actual)	\$831,173	\$779,882
October Expenditures paid in September	<u>\$0</u>	\$4,360
Investments, at fair market value (adjusted)	\$831,173	\$784,242

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>2018</u>	<u>2017</u>
Net assets available for benefits at beginning of plan year:	\$789,591	\$763,808
1) Investment/Inflation income (coupons received)	\$35,554	\$26,335
2) Net appreciation (depreciation) in fair market value of investments	\$(32,616)	\$(49,067)
3) Contributions from services	\$18,400	\$18,300
4) Appropriation to amortize the initial unfunded liability	\$82,877	\$81,192
5) Appropriation for Treasury Normal Cost Contribution	\$6,837	\$6,822
Total additions $(1+2+3+4+5)$	\$ <u>111,052</u>	\$ <u>83,582</u>
Less: Benefits paid to participants ¹	\$ <u>58,865</u>	\$ <u>57,799</u>
Net assets available for benefits at end of plan year	\$ <u>841,778</u>	\$ <u>789,591</u>

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

	<u>2018</u>	<u>2017</u>
Benefits paid on cash basis	\$58,865	\$57,799
Change in liability for benefits due at end of year	<u>\$0</u>	\$0
Benefits paid on accrual basis	\$58,865	\$57,799

⁻

COMPARISON OF DOD BOARD AND SFFAS 33 ACTUARIAL LIABILITIES

The DoD Office of the Actuary (OACT) performs two annual valuations of the Military Retirement Fund liabilities. 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, 2018, actuarial liability for the financial statements (which was due in early October 2018) was projected based on the September 30, 2017, Board valuation. The September 30, 2018, Board valuation (documented in this report) was performed at a later time, based on actual September 30, 2018 data, and therefore resulted in a different September 30, 2018 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 States Code.

Currently, a separate financial statement valuation (i.e., with different assumptions) is necessary to satisfy a 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 an interest rate assumption based on methodologies described in Appendix D.

SFFAS 33 requires the use of a yield curve based on marketable U.S. Treasury securities, with a minimum of five years of historical rates for the yield curve input and consistency in the number of historical rates used from period to period. OACT used the U.S. Department of the Treasury-Office of Economic Policy's 10-year Average Yield Curve for Treasury Nominal Coupon Issues ('TNC yield curve' – Source: https://www.treasury.gov/resource-center/economic-policy/corp-bond-yield/Pages/TNC-YC.aspx) representing average rates from April 1, 2008, through March 31, 2018, resulting in a single-equivalent interest rate of 3.5%. This is comparable to the Board valuation interest rate of 5%.

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, 2018, financial statement valuation, SFFAS 33 required the long-term inflation and salary increase assumptions to be consistent with the underlying TNC yield curve used in the valuation. The September 30, 2018, SFFAS 33 economic assumptions are shown in the concluding note of Table L-3.

SFFAS 33 permits the use of a single average interest rate if the resulting present value is not materially different from what would be obtained using the yield curve. Table L-3 compares the SFFAS 33 liability to the corresponding Board liability. Measuring the Fund's actuarial

liability using SFFAS 33 long-term economic assumptions (as compared to Board assumptions) results in a liability that is higher by approximately 5.4%1.

Note that this amount, which is the difference between the two actuarial liabilities shown in Table L-3, also includes the impact of the different populations on which the two liabilities are based.

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, 2018:

		DoD Board ¹	<u>SFFAS 33</u> ²
1.	Present value of future benefits	\$1,798.0	\$1,886.4
2.	Present value of future normal cost contributions	\$264.6	<u>\$270.0</u>
3.	Actuarial accrued liability $(1 2.)$	\$1,533.4	\$1,616.4

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

	DoD Board	SFFAS 33
Full COLA:	2.75%	1.5%
Basic Pay:	3.25%	2.0%
Interest:	5.00%	3.5%

¹ Reproduced from Table 6A in main text.

Reproduced from the 'Fiscal Year 2018 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: https://comptroller.defense.gov/odcfo/afr2018.aspx. The 'Actuarial Certification' (page 2) does not apply to these figures.

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, OACT and 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; (2) the payment stream completely liquidates the additional liability, with a new overall weighted period determined using (i) 30 years weighted by the absolute value of the new liability, and (ii) the remaining period on the unamortized balance prior to the new liability weighted by the absolute value of that balance; 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 often 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 that are or have been used by other federal and public sector pension plans. Additionally, the Board has annual discussions regarding the appropriateness of the amortization procedure.

Annual payments on the initial UFL are also calculated to increase each year by the long-term basic pay scale assumption, and as stated earlier in this report, the initial UFL is currently scheduled to be liquidated with the October 1, 2025 payment.

Experience gains and losses, which create changes in the UFL, occur every year. The payment streams to amortize these changes are combined. This produces one single payment stream for the category of experience gains and losses and eliminates the tedious tracking of up

to 30 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.

Actuarial gains and losses are changes in the UFL that result from actual experience in a pension plan deviating from what was expected, benefit changes, or assumption changes. An actuarial gain is a *decrease* in the UFL and is usually expressed as a negative number. Conversely, a loss represents an *increase* in the UFL and is usually expressed as a positive number. The amortization payment for a negative 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 assumption. 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 assumption.

CALCULATION OF THE OCTOBER 1, 2019, TREASURY PAYMENT

The following pages (Tables M-1 through M-5) display the calculation of the October 1, 2019, Treasury payment based on the September 30, 2018, 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 FY 1998 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 (P.L.) 108-136 required the Department of Treasury to pay for the increase in the normal cost due to Concurrent Receipt. Beginning with FY 2005, 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, 2019, Treasury payment, the actuarially determined amount due to Concurrent Receipt totals \$9.305 billion. This is computed using the full- and part-time normal cost percentages (NCPs) in Table 6A of the main text (item 8). The NCPs are multiplied by the DoD Comptroller-budgeted FY 2020 full- and part-time basic pay, \$63.1 billion and \$9.3 billion, respectively, i.e., \$9.305 billion equates to the sum of \$63.1 billion x 14.2% and \$9.3 billion x 3.8%.

Treasury concurrent receipt normal costs displayed on the next page reflect actuarially calculated amounts. However, due to the Budget Control Act of 2011, in both FY 2019 and 2020 actual Treasury contributions for these amounts were reduced (or sequestered); the reductions were 8.7% (or \$0.754 billion) in FY 2019 and 8.6% (or \$0.800 billion) in FY 2020. Consistent with past practice, at their July 2019 meeting the Board decided to treat the FY 2019 sequestered amount of \$0.754 billion as an experience loss in the FY 2018 valuation, and amortized it (brought forward with one year's assumed interest) over one year. It is included in the FY 2020 payment on the next page. (See "Unpaid contribution" of \$0.791 billion = \$0.754 billion x 1.05.) The Board will likely treat the FY 2020 sequestered amount in the same manner (i.e., as a loss in the 2019 valuation and added, with interest, to the FY 2021 Treasury payment).

TABLE M-1

TOTAL TREASURY PAYMENT OCTOBER 1, 2019 AND OCTOBER 1, 2018

		October 1, 2019	October 1, 2018
Amortization	payment for:		
1.	Initial unfunded liability	\$98.057	\$94.971
2.	Changes in benefits	\$8.858	\$8.214
3.	Gains and Losses Amortization		
	a. Changes in actuarial assumptions	\$6.361	\$6.383
	b. Actuarial experience	\$(22.194)	\$(22.273)
	c. Unpaid contribution	\$0.791	\$0.701
	Total amortization payment	\$ <u>91.873</u>	\$ <u>87.996</u>
Norm	nal cost payment	\$ <u>9.305</u>	\$ <u>7.909</u>
	Total Treasury payment	<u>\$101.178</u>	<u>\$95.905</u>

CALCULATION OF OCTOBER 1, 2019, PAYMENT ON INITIAL UNFUNDED LIABILITY (UFL)

1.	Unamortized balance of initial UFL $(10/1/17 \text{ balance} \times 1.05)$	9/30/18	\$ 716.895
2.	Payment on UFL	10/1/18	\$ 94.971
3.	Unamortized balance of initial UFL (1 2.)	10/1/18	\$ 621.924
4.	Balance on 9/30/19 (3. × 1.05)	9/30/19	\$ 653.020
5.	Number of Annual Payments Remaining	9/30/18	7
6.	Value of an annuity due for remaining amortization period at interest rate equal to $(1.05 \div 1.0325)$ - 1		6.6596
7.	Payment on initial UFL due $10/1/19$ (4. ÷ 6.)		<u>\$ 98.057</u>

CALCULATION OF OCTOBER 1, 2019, PAYMENT ON UNFUNDED LIABILITY (UFL) RESULTING FROM BENEFIT CHANGES

1. Unamortized UFL balance (10/1/17 balance x 1.05	_	9/30/18	\$ 129.327
2. Payment on UFL		10/1/18	\$ 8.214
3. Unamortized UFL balan (1 2.)	nce after payment	10/1/18	\$ 121.113
4. Additional (new) UFL	due to benefit changes	9/30/18	\$ 0.000
5. Unamortized UFL balan (3. + 4.)	nce due to benefit changes	10/1/18	\$ 121.113
6. Balance on 9/30/18 (5. × 1.05)		9/30/19	\$ 127.168
7. Total number of years of amortization schedule	of prior		17.27
8. Remaining number of you amortization schedule (7 1)	ears of prior		16.27
9. Total number of years of (absolute values used for	of new amortization schedule or all numbers)		
$[(3. \times 8.) + (4. \times 30)] \div$	(3. + 4.)		16.27
10. Value of an annuity due at interest rate equal to	e for remaining amortization period $(1.05 \div 1.0325)$ - 1		14.3565
11. Payment on UFL due to (6. ÷ 10.)	benefit changes	10/1/19	<u>\$ 8.858</u>

CALCULATION OF OCTOBER 1, 2019, PAYMENT ON UNFUNDED LIABILITY (UFL) RESULTING FROM ASSUMPTION CHANGES

1.	Unamortized balance of UFL due to assumption changes ($10/1/17$ balance \times 1.05)	9/30/18	\$ 143.540
2.	Payment on UFL	10/1/18	\$ 6.383
3.	Unamortized UFL balance after payment (1 2.)	10/1/18	\$ 137.157
4.	Additional (new) UFL	9/30/18	(\$ 4.393)
5.	Unamortized UFL balance due to assumption changes (3. + 4.)	10/1/18	\$ 132.764
6.	Balance on $9/30/19$ (5. \times 1.05)	9/30/19	\$139.402
7.	Number of years in prior amortization schedule		27.95
8.	Remaining number of years in prior amortization schedule (7 1)		26.95
9.	Number of years in new amortization schedule (absolute values used for all numbers) $[(3. \times 8.) + (4. \times 30)] \div (3. + 4.)$		27.04
10	Value of an annuity due for remaining amortization period at interest rate equal to $(1.05 \div 1.0325)$ - 1		21.9141
11.	Payment on UFL due to assumption changes (6. ÷ 10.)	10/1/19	<u>\$ 6.361</u>

CALCULATION OF OCTOBER 1, 2019, PAYMENT ON UNFUNDED LIABILITY (UFL) RESULTING FROM EXPERIENCE GAINS AND LOSSES

1.	Unamortized UFL balance due to experience gains and losses (10/1/17 balance × 1.05)	9/30/18	\$ (270.518)
2.	Payment on UFL	10/1/18	\$ (21.572)
3.	Unamortized UFL balance after payment (1 2.)	10/1/18	\$ (248.946)
4.	Additional (new) UFL	9/30/18	\$ 3.963
5.	Unamortized UFL balance due to experience gains and losses (3. + 4.)	10/1/18	\$ (244.983)
6.	Balance on 9/30/19 (5. × 1.05)	9/30/19	\$ (257.232)
7.	Number of years in prior amortization schedule		13.50
8.	Remaining number of years in prior amortization schedule (7 1)		12.50
9.	Number of years in new amortization schedule (absolute values used for all numbers) $[(3. \times 8.) + (4. \times 30)] \div (3. + 4.)$		12.77
10	. Value of an annuity due for remaining amortization period at interest rate equal to $(1.05 \div 1.0325)$ - 1		11.5900
11	Payment* on UFL due to experience gains and losses (6. ÷ 10.)	10/1/19	<u>\$ (22.194)</u>

^{*} Excludes payment on loss due to 10/1/18 unpaid (sequestered) contribution.

OACT ENDNOTES

VISION STATEMENT Dod Office of the actuary

To be leaders in the evaluation of future contingent events and risk related to the financial aspects of military benefits and to provide high-quality actuarial support to key stakeholders.

MISSION STATEMENT Dod Office of the actuary

The Office of the Actuary (OACT) performs actuarial valuations and provides actuarial support and expertise for the following major benefit programs and funds: the Military Retirement System/Military Retirement Fund; Military Health System, including the portion funded through the Medicare-Eligible Retiree Health Care Fund; education benefits funded through the Education Benefits Fund; and separation benefits funded through the Voluntary Separation Incentive Fund. We fulfill the Secretary of Defense's statutory requirements for actuarial funding determinations for these programs, and we provide requisite actuarial support to the independent Boards of Actuaries that oversee the determinations. OACT is responsible for: providing actuarial liabilities and associated input for the Department's and government-wide financial statements; providing quarterly Incurred-But-Not-Reported reserve estimates for DoD health care programs; informing policy analysis of military benefit provisions and proposals by providing actuarial and cost analysis; providing actuarial support and products for the execution of benefit programs including the Survivor Benefit Plan; providing actuarial support and expertise on matters related to investing the assets of funds that finance military benefit programs; and providing actuarial and statistical information about the Military Retirement System for key stakeholders.

CONTACT INFORMATION Dod Office of the actuary

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

VALUATION OF THE MILITARY RETIREMENT SYSTEM SEPTEMBER 30, 2019

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