Civil Service Retirement and Disability Fund Annual Report

Fiscal Year Ended September 30, 2015



OPM.GOV JANUARY 2016

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Financial Section

CIVIL SERVICE RETIREMENT AND DISABILITY FUND STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS

As of September 30, 2015 and 2014 – Unaudited (In Thousands)

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2015	Total Fund 2014
Assets:				
Investments, at Fair Value [Note 5]	\$219,698,159.	\$ 511,568,444	\$ 731,266,603	\$857,168,700
Receivables:				
Contributions by Employers	62,918	1,184,727	1,247,645	825,553
Contributions by Participants	34,026	79,977	114,003	96,072
Accrued Interest on Investments	2,845,489	3,621,532	6,467,021	7,327,992
Other	386,905	604,479	991,384	296,997
Total Receivables	3,329,338	5,490,715	8,820,053	8,546,614
Cash [Note 3]	99,820,517	40,799,199	140,619,716	27,071
Total Assets	322,848,014	557,858,358	880,706,372	865,742,385
Liabilities:				
Annuities Benefits Payable	5,403,112	949,632	6,352,744	6,182,200
Refunds of Contributions Payable	47,572	9,438	57,010	53,916
Taxes, Insurance and Other Withholdings	636,690	234,599	871,289	847,507
Administrative and Other Liabilities	82,775	20,769	103,544	101,507
Total Liabilities	6,170,149	1,214,438	7,384,587	7,185,130
Net Assets Available for Benefits	\$316,677,865	\$556,643,920	\$873,321,785	\$858,557,255

CIVIL SERVICE RETIREMENT AND DISABILITY FUND STATEMENTS OF CHANGES IN NET ASSETS AVAILABLE FOR BENEFITS

For the Years Ended September 30, 2015 and 2014 – Unaudited (In Thousands)

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2015	Total Fund 2014
Additions to Net Assets Attributable to: Investment Income:				
Interest	\$ 12,340,359	\$ 16,042,399	\$, 28,382,758	\$30,514,292
Contributions:				
Employer	866,225	27,138,987	28,005,212	24,745,874
Employees	1,054,602	2,147,841	3,202,443	3,011,691
Special	33,243,854	3,600,708	36,844,562	35,034,161
Total Contributions	35,164,681	32,887,536	68,052,217	62,791,726
Total Additions to Net Assets	47,505,040	48,929,935	96,434,975	93,306,018
Deductions from Net Assets Attributable to: Annuities:				
Retirees	60,716,663	10,655,119	71,371,782	69,195,070
Survivors	9,268,444	427,499	9,695,943	9,621,386
Total Annuities	69,985,107	11,082,618	81,067,725	78,816,456
Refunds of Contributions	287,216	148,993	436,209	424,978
Transfer to Other Retirement System	7,674	-	7,674	2,095
Administrative and Other Expenses	114,397	44,440	158,837	142,477
Total Deductions from Net Assets	70,394,394	11,276,051	81,670,445	79,386,006
Net Increase (Decrease) in Net Assets	(22,889,354)	37,653,884	14,764,530	13,920,012
Net Assets Available for Benefits:		7 40.000.05	0.70 7.77 0.57	a : :
Beginning of Year	339,567,219	518,990,036	858,557,255	844,637,243
End of Year	\$316,677,865	\$556,643,920	\$873,321,785	\$858,557,255

CIVIL SERVICE RETIREMENT AND DISABILITY FUND STATEMENTS OF ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

As of September 30, 2014 and 2013 – Unaudited (In Millions)

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2014	Total Fund 2013
Actuarial Present Value of Accumulated Plan Benefits:				
Vested Benefits: Participants Currently Receiving Payments	\$935,300	\$158,900	\$1,094,200	\$1,065,600
Other Participants	142,100	243,500	385,600	392,500
Total Vested Benefits	1,077,400	402,400	1,479,800	1,458,100
Nonvested Benefits	3,300	47,800	51,100	52,800
Total Actuarial Present Value of Accumulated Plan Benefits	\$1,080,700	\$450,200	\$1,530,900	\$1,510,900

CIVIL SERVICE RETIREMENT & DISABILITY FUND

STATEMENTS OF CHANGES IN ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS

For the Years Ended September 30, 2014 and 2013 – Unaudited (In Millions)

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2014	Total Fund 2013
Actuarial Present Value of Accumulated				
Plan Benefits at Beginning of Year	\$1,098,600	\$412,300	\$1,510,900	\$1,491,700
Increase (Decrease) During the Year Attributable to:				
Benefits Accumulated, Less Benefits Paid	(17,900)	37,900	20,000	19,200
Changes in Actuarial Assumptions		-	-	
Net Increase	(17,900)	37,900	20,000	19,200
Actuarial Present Value of Accumulated Plan Benefits at End of Year	\$1,080,700	\$450,200	\$1,530,900	\$1,510,900

CIVIL SERVICE RETIREMENT & DISABILITY FUND SCHEDULE OF INVESTMENTS AS OF SEPTEMBER 30, 2015

MATURITY		INTEREST	PAR	
DATE	SECURITY	<u>RATE</u>	<u>VALUE</u>	TOTAL
<u>2016</u>				
30-Jun-16	Special Bonds	1.375%	502,596,000.00	
30-Jun-16	Special Bonds	1.750%	262,109,000.00	
30-Jun-16	Special Bonds	1.750%	859,725,000.00	
30-Jun-16	Special Bonds	2.250%	845,914,000.00	
30-Jun-16	Special Bonds	3.250%	4,706,026,000.00	
30-Jun-16	Special Bonds	3.500%	1,960,410,000.00	
30-Jun-16	Special Bonds	4.000%	1,833,592,000.00	
30-Jun-16	Special Bonds	4.125%	1,974,210,000.00	
30-Jun-16	Special Bonds	4.625%	477,525,000.00	
30-Jun-16	Special Bonds	5.000%	670,127,000.00	
30-Jun-16	Special Bonds	5.125%	1,846,145,000.00	
30-Jun-16	Special Bonds	5.250%	2,056,291,000.00	
30-Jun-16	Special Bonds	5.625%	35,127,209,000.00	
Subtotal			53,121,879,000.00	53,121,879,000.00
<u>2017</u>				
30-Jun-17	Special Bonds	1.375%	1,056,063,000.00	
30-Jun-17	Special Bonds	1.750%	262,109,000.00	
30-Jun-17	Special Bonds	1.750%	859,725,000.00	
30-Jun-17	Special Bonds	2.250%	845,914,000.00	
30-Jun-17	Special Bonds	3.250%	4,609,326,000.00	
30-Jun-17	Special Bonds	3.500%	1,960,410,000.00	
30-Jun-17	Special Bonds	4.000%	1,833,592,000.00	
30-Jun-17	Special Bonds	4.125%	1,974,210,000.00	
30-Jun-17	Special Bonds	4.625%	983,610,000.00	
30-Jun-17	Special Bonds	5.000%	670,126,000.00	
30-Jun-17	Special Bonds	5.125%	1,846,146,000.00	
30-Jun-17	Special Bonds	5.250%	37,183,500,000.00	5 4 00 4 5 21 000 00
Subtotal			54,084,731,000.00	54,084,731,000.00
2018				
30-Jun-18	Special Bonds	1.375%	1,056,063,000.00	
30-Jun-18	Special Bonds	1.750%	262,108,000.00	
30-Jun-18	Special Bonds	1.750%	859,726,000.00	
30-Jun-18	Special Bonds	2.250%	845,914,000.00	
30-Jun-18	Special Bonds	3.250%	4,869,819,000.00	
30-Jun-18	Special Bonds	3.500%	39,143,910,000.00	
30-Jun-18	Special Bonds	4.000%	1,833,592,000.00	
30-Jun-18	Special Bonds	4.125%	1,974,210,000.00	
30-Jun-18	Special Bonds	4.625%	1,172,079,000.00	
30-Jun-18	Special Bonds	5.000%	670,126,000.00	

30-Jun-18	Special Bonds	5.125%	1,846,146,000.00	
Subtotal			54,533,693,000.00	54,533,693,000.00
<u>2019</u>			4 0 2 4 0 4 2 0 0 0 0 0	
30-Jun-19	Special Bonds	1.375%	1,056,062,000.00	
30-Jun-19	Special Bonds	1.750%	262,109,000.00	
30-Jun-19	Special Bonds	1.750%	859,726,000.00	
30-Jun-19	Special Bonds	2.250%	845,914,000.00	
30-Jun-19	Special Bonds	3.250%	4,580,347,000.00	
30-Jun-19	Special Bonds	4.000%	1,833,592,000.00	
30-Jun-19	Special Bonds	4.125%	1,974,210,000.00	
30-Jun-19	Special Bonds	4.625%	40,192,942,000.00	
30-Jun-19	Special Bonds	5.000%	670,126,000.00	
30-Jun-19	Special Bonds	5.125%	1,846,146,000.00	
Subtotal			54,121,174,000.00	54,121,174,000.00
2020				
2020	Special Bonds	1 2750/	1 056 062 000 00	
30-Jun-20 30-Jun-20	•	1.375% 1.750%	1,056,062,000.00	
	Special Bonds Special Bonds		262,109,000.00	
30-Jun-20	Special Bonds	1.750%	859,726,000.00	
30-Jun-20 30-Jun-20	•	2.250%	845,914,000.00	
	Special Bonds	2.875%	3,871,777,000.00	
30-Jun-20	Special Bonds	4.000%	1,833,592,000.00	
30-Jun-20	Special Bonds	4.125%	42,858,641,000.00	
30-Jun-20	Special Bonds	5.000%	670,126,000.00	
30-Jun-20	Special Bonds	5.125%	1,846,146,000.00	7.1.10.1.002.000.00
Subtotal			54,104,093,000.00	54,104,093,000.00
2021				
30-Jun-21	Special Bonds	1.375%	1,056,062,000.00	
30-Jun-21	Special Bonds	1.750%	262,109,000.00	
30-Jun-21	Special Bonds	1.750%	859,726,000.00	
30-Jun-21	Special Bonds	2.250%	845,914,000.00	
30-Jun-21	Special Bonds	2.875%	4,210,300,000.00	
30-Jun-21	Special Bonds	4.000%	1,833,592,000.00	
30-Jun-21	Special Bonds	5.000%	670,126,000.00	
30-Jun-21	Special Bonds	5.125%	44,704,787,000.00	
Subtotal	•	•	54,442,616,000.00	54,442,616,000.00
2022	C 1.D 1	1.0750/	1.056.060.000.00	
30-Jun-22	Special Bonds	1.375%	1,056,062,000.00	
30-Jun-22	Special Bonds	1.750%	262,109,000.00	
30-Jun-22	Special Bonds	1.750%	859,726,000.00	
30-Jun-22	Special Bonds	2.250%	845,914,000.00	
30-Jun-22	Special Bonds	2.875%	4,213,087,000.00	
30-Jun-22	Special Bonds	4.000%	1,833,592,000.00	
30-Jun-22	Special Bonds	5.000%	45,374,913,000.00	## ### #O@ 000 ==
Subtotal			54,445,403,000.00	54,445,403,000.00

2023				
30-Jun-23	Special Bonds	1.375%	1,056,062,000.00	
30-Jun-23	Special Bonds	1.750%	262,109,000.00	
30-Jun-23	Special Bonds	1.750%	859,726,000.00	
30-Jun-23	Special Bonds	2.250%	845,914,000.00	
30-Jun-23	Special Bonds	2.875%	4,189,197,000.00	
30-Jun-23	Special Bonds	4.000%	47,208,505,000.00	
Subtotal			54,421,513,000.00	54,421,513,000.00
2024	0 10 1	1.2750/	1 05 (0 (2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
30-Jun-24	Special Bonds	1.375%	1,056,062,000.00	
30-Jun-24	Special Bonds	1.750%	262,109,000.00	
30-Jun-24 30-Jun-24	Special Bonds Special Bonds	1.750% 2.250%	859,726,000.00	
30-Jun-24 30-Jun-24	Special Bonds	2.230%	845,913,000.00 51,695,533,000.00	
Subtotal	Special Bolids	2.07370	54,719,343,000.00	54,719,343,000.00
Bubtotai			34,717,343,000.00	34,717,343,000.00
<u>2025</u>				
30-Jun-25	Special Bonds	1.375%	1,056,062,000.00	
30-Jun-25	Special Bonds	1.750%	262,109,000.00	
30-Jun-25	Special Bonds	1.750%	859,726,000.00	
30-Jun-25	Special Bonds	2.250%	845,913,000.00	
30-Jun-25	Special Bonds	2.875%	4,512,464,000.00	
30-Jun-25	Special Bonds	2.875%	17,100,000,000.00	
30-Jun-25	Special Bonds	2.500%	31,015,159,000.00	
Subtotal			55,651,433,000.00	55,651,433,000.00
<u>2026</u>				
30-Jun-26	Special Bonds	1.375%	6,193,171,000.00	
30-Jun-26	Special Bonds	1.750%	262,109,000.00	
30-Jun-26	Special Bonds	1.750%	859,726,000.00	
30-Jun-26	Special Bonds	2.250%	845,913,000.00	
30-Jun-26	Special Bonds	2.500%	11,495,789,000.00	
30-Jun-26	Special Bonds	2.500%	35,994,725,000.00	
Subtotal			55,651,433,000.00	55,651,433,000.00
2025				
2027 30-Jun-27	Special Bonds	1.375%	12,500,000,000.00	
30-Jun-27	Special Bonds	1.375%	9,191,486,000.00	
30-Jun-27	Special Bonds	1.375%	31,922,199,000.00	
30-Jun-27	Special Bonds	1.750%	1,121,835,000.00	
30-Jun-27	Special Bonds	1.375%	70,000,000.00	
30-Jun-27	Special Bonds	2.250%	845,913,000.00	
Subtotal	•		55,651,433,000.00	55,651,433,000.00
<u>2028</u>				
30-Jun-28	Special Bonds	1.750%	6,645,794,000.00	

30-Jun-28	Special Bonds	1.750%	859,726,000.00	
30-Jun-28 Subtotal	Special Bonds	2.250%	845,913,000.00 8,351,433,000.00	8,351,433,000.00
2029 30-Jun-29	Special Bonds	2.250%	55,651,433,000.00	
Subtotal				55,651,433,000.00
	AL SPECIAL ONDS			718,951,610,000.00
FFB Bonds			12,314,993,000.00	
Subtotal		_	-	12,314,993,000.00
TOT	TAL INVESTMENT	TS AS OF SEPT	ΓEMBER 30, 2015	731,266,603,000.00*

st See Note 5 related to Debt Issuance Suspension Period (DISP).

CIVIL SERVICE RETIREMENT AND DISABILITY FUND NOTES TO FINANCIAL STATEMENTS

For the Years Ended September 30, 2014 & 2015

NOTE 1 - DESCRIPTION OF PLANS

The following brief description of the Civil Service Retirement and Disability Fund (the "Fund") is provided for general information purposes only. Participants should refer to Title 5, United States Code Chapters 83 and 84, for a complete description of the Fund's provisions.

A. General

The United States Office of Personnel Management (OPM) administers two defined-benefit retirement plans, via the Fund: the Civil Service Retirement System (CSRS) and the Federal Employees' Retirement System (FERS). Combined, the two Plans cover 100 percent of all eligible employees. As government-sponsored benefit plans, the CSRS and FERS are not subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended.

The CSRS was established by the <u>Civil Service Retirement Act</u>, which was enacted on May 22, 1920. It is a standalone retirement plan intended to provide reasonable benefits for long-service Federal employees. The CSRS, which is closed to new participants, covers most Federal employees who first entered a covered position before 1984.

The FERS was established by the <u>Federal Employees' Retirement System Act of 1986</u>, which was enacted on June 6, 1986. Using Social Security as a base, the FERS provides an additional defined benefit and a voluntary thrift savings plan. The FERS generally covers employees who first entered a covered position after December 31, 1983. When FERS became effective on January 1, 1987, CSRS interim employees with less than 5 years of creditable civilian service on December 31, 1986, were automatically converted to FERS.

B. Retirement Benefits

The CSRS provides full retirement benefits at age 55 with 30 years of service, age 60 with 20 years of service, or age 62 with 5 years of service. Deferred benefits are payable at age 62 with 5 years of service. The annuity formula provides 1.5 percent of average salary for the first five years of service, 1.75 percent for the next five years, and 2 percent for any remaining service, up to a maximum of 80 percent of average salary (based on the highest three consecutive years of salary). Special benefits are provided for certain law enforcement officers, firefighters, air traffic controllers, bankruptcy judges, congressional employees, Members of Congress, and certain other groups.

The FERS provides full retirement benefits at the "Minimum Retirement Age" (MRA) with 30 years of service, age 60 with 20 years of service, or age 62 with 5 years of service. The MRA is 55 for those born before 1948, and incrementally increases to 57 for those born in or after 1970. Deferred retirement benefits are available at or after the MRA with 10 years of service at reduced benefit levels. The annuity formula generally provides one percent of the employee's average salary (based on the highest three consecutive years of salary) times the number of years of creditable service. If retirement is at age 62 or later, with at least 20 years of service, a factor of 1.1 percent is used rather than 1 percent. Special benefits are provided for certain law enforcement officers, firefighters, air traffic controllers, bankruptcy judges, congressional employees, Members of Congress, and certain other groups.

C. Disability Benefits

The CSRS requires that employees have at least five years of creditable civilian service to qualify for disability retirement benefits. Benefits are generally equal to the higher of (1) the CSRS computation described in Note 1.B. or (2) a guaranteed minimum disability annuity, consisting of the lower of 40 percent of the highest three years' average salary or the regular earned annuity formula using service projected to age 60.

Under the FERS, disability retirement may occur at any age with 18 months of service. In the first year of retirement, disability benefits are generally 60 percent of the average of the highest three consecutive years of salary, minus the employee's Social Security disability benefits. Subsequently, disabled employees receive 40 percent of their high-three average yearly salary, minus 60 percent of their Social Security disability benefit, until recomputation at age 62.

D. Death Benefits

Under the CSRS, the spouses of employees who die in service receive 55 percent of the retirement benefits the employee would have received had they retired on disability. The spouses of deceased annuitants receive 55 percent of the annuity, unless a survivor benefit was waived or a less than full survivor benefit was elected. Children receive a flat monthly benefit amount.

Under the FERS, the spouses of employees who die in service after at least 18 months of service receive one-half of the annual rate of pay at death, or one-half of the average of the highest three consecutive years of salary as of the date of death, whichever is higher, plus a lump-sum payment adjusted annually for COLAs (cost-of-living allowances) under CSRS rules. If the employee had at least 10 years of service, the surviving spouse also receives an annuity equaling 50 percent of the accrued basic retirement benefit. The spouses of deceased annuitants receive 50 percent of the annuity, unless a survivor benefit was waived or a less than full survivor benefit was elected. Children receive a flat monthly benefit amount, minus the amount of Social Security benefits payable to them. Annuity benefits for children end when the child reaches age 18, marries, or dies. Benefits for student children, stop at the end of the month before the one in which the student child: turns 22; marries; dies; stops attending school; transfers to a school that is not recognized; changes to less than full-time attendance; enters military service or a Government service academy; or fails to submit certification of full-time school attendance.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

The accompanying financial statements include all Fund financial activities for which OPM has fiduciary responsibility. These comprise the CSRS and the defined benefit portion of the FERS. The financial activities related to the Social Security and thrift savings plan provisions of the FERS are not activities of the Fund, are not administered by OPM and are, therefore, not included in the accompanying financial statements.

B. Basis of Accounting

The accompanying financial statements are prepared on the accrual basis of accounting.

C. Use of Estimates

As part of the process of preparing financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, disclosure of contingent assets and liabilities, and the actuarial present value of accumulated plan benefits at the date of the financial statements. Actual results could differ from those estimates.

D. Investment Valuation and Income Recognition

All Fund investments are in interest-bearing U.S. Treasury securities guaranteed as to principal and interest. Throughout the year, monies are invested initially in Certificates of Indebtedness ("Certificates"), which are issued at par value and mature on the following June 30. The Certificates are routinely redeemed at face value to pay for authorized expenditures. Each June 30, the outstanding Certificates are "rolled over" into government account series (GAS) securities that are issued to the Fund at par-value, with maturities spread over a 15-year period and a yield equaling the average of all marketable U.S. Treasury securities with four or more years to maturity. The Fund also carries, but does not routinely invest in, securities issued by the Federal Financing Bank (FFB) as well as marketable Treasury bonds. As of September 30, 2015 and September 30, 2014, there were no Treasury bonds among the Fund's invested assets of the CSRS and FERS (and related interest income) represent allocations from the Fund's invested assets, based upon the proportionate investment contribution balance of each Plan.

The fair value of the GAS securities, Certificates, and FFB securities is equal to their par values. The fair value of the marketable Treasury bonds, as well as their appreciation and depreciation, is based on quoted market prices. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis.

E. Actuarial Present Value of Accumulated Plan Benefits

Accumulated plan benefits are those future periodic payments, including lump-sum distributions, that are attributable, under the Plans' provisions, to service that employees have rendered. Accumulated plan benefits include benefits expected to be paid to (a) retired or terminated employees or their beneficiaries; (b) beneficiaries of employees who have died; and (c) present employees or their beneficiaries. Benefits under the Plans are based on employee service and compensation. The accumulated plan benefits for active employees are based on compensation as of the valuation date. Benefits payable under all circumstances -- retirement, death, disability, and termination of employment -- are included to the extent they are deemed attributable to employee service rendered to the valuation date.

The Actuarial Present Value of Accumulated Plan Benefits is determined by an actuary employed by OPM and is the amount that results from applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal, or retirement) between the valuation date and the expected date of payment. The Actuarial Present Value of Accumulated Plan Benefits is measured as of the first day of the fiscal year.

The significant demographic assumptions used in the valuation are mortality rates of participants and retirement age assumptions. All demographic rates are based on recent experience under the CSRS and FERS.

The following table presents the significant economic assumptions used to compute the Actuarial Present Value of Accumulated Plan Benefits for 2015 and 2014:

Economic Assumptions:	2015	2014
Interest rate (%)	5.25	5.25
Rate of inflation (%)	3.00	3.00

The foregoing actuarial assumptions are based on the presumption that the Plans will continue. Were the Plans to terminate, different actuarial assumptions and other factors might be applicable in determining the Actuarial Present Value of Accumulated Plan Benefits.

F. Payment of Benefits

Benefit payments to participants are recorded upon distribution.

G. Risks and Uncertainties

Contributions to the Plan and the actuarial present value of accumulated plan benefits are based on certain assumptions pertaining to interest rates, inflation rates, employee compensation and demographics. Due to the uncertainties inherent in the estimation process, it is reasonable that changes in these assumptions in the near term could have a material effect on the financial statements.

NOTE 3 - CASH

Cash represents the amount on deposit with the U.S. Treasury that is immediately available to the Fund for the payment of benefits and other expenses. There are no restrictions or pledges over cash.

NOTE 4 - FUNDING POLICY

A. CSRS

Employer and Employee Contributions. As a condition of participation in the CSRS, participating employees are required to contribute a percentage of their pay to the Fund.

For fiscal years 2015 and 2014, the employee contribution rate was 7.0 percent of pay. Participating law enforcement officers, firefighters, congressional employees, and Members of Congress contributed a higher percentage.

Employing agencies contributed a higher percentage for law enforcement officers, firefighters, congressional employees, and Members of Congress.

Special Contribution. The combined 14.0 percent of pay does not cover the service cost of a CSRS benefit. To lessen the shortfall, the Fund receives an annual contribution from the U.S. Treasury that includes amounts that (a) amortize, over a 30-year period, increases in the actuarial present value of accumulated plan benefits resulting from new or liberalized benefits, increases in pay, or extension of coverage to new employee groups; (b) pays 5.0 percent interest on the unfunded portion of the actuarial present value of the static actuarial liability; and (c) reimburses the Fund for the cost of benefits attributable to military service credit and certain survivor annuities.

B. FERS

Employer and Employee Contributions. As a condition of participation in the FERS, participating employees are required to contribute a percentage of their pay to the Fund. FERS employee contributions are equal to a percentage of pay that is equal to the difference between the contribution rate for CSRS participants, as set forth above, 7.0 percent, and the Old Age, Survivors, and Disability Insurance (OASDI) rate, currently 6.2 percent of pay. Thus the contribution rate for most of the FERS participants in fiscal years 2015 and 2014 is 0.8 percent of pay. Participating law enforcement officers, firefighters, congressional employees, and Members of Congress contributed a higher percentage.

Employing agencies must also make contributions to the Fund on behalf of their participating employees. The employer contribution rate is equal to the FERS service cost, less the participant contribution rate (11.9 percent of pay in FYs 2015 and 2014 for most participants).

The Middle Class Tax Relief and Job Creation Act of 2012, P.L. 112-96, Section 5001 - Federal Employees Retirement, increased by 2.3 percent the employee pension contribution for Federal employees entering service during calendar year 2013. The participant contribution rate for these FERS-Revised Annuity Employees (FERS-RAE) is 3.1 percent of pay and the employer contribution rate is 9.6 percent of pay in FY 2014.

The Bipartisan Budget Act of 2013 (P.L. 113-67), includes further revisions to contribution rates required for FERS-Further Revised Annuity Employees (FERS-FRAE), first hired after December 31, 2013. FERS-FRAE provides for an additional 1.3 percent increase to employee contribution rates. The FERS-FRAE agency contributions for non-Postal employing agencies are generally held at the same rate as for FERS-RAE; P.L. 113-67 requires that FERS-FRAE contributions in excess of the normal cost be used to address the unfunded actuarial liability for CSRS.

NOTE 5 - INVESTMENTS

The following table presents the estimated fair value of Fund investments at September 30, 2015 and 2014 (in millions). Individual investments that represent five percent or more of the Fund's net assets available for benefits are separately identified on the next page:

	CSRS 2015	FERS 2015	Total 2015	Total 2014
GAS securities:				
5.125% due 2021	19,670	25,035	44,705	44,705
5.000% due 2022	19,965	25,410	45,375	45,375
4.000% due 2023	20,772	26,437	47,209	47,208
2.875% due 2024	22,746	28,949	51,695	47,695
1.750% due 2028	23,736	30,210	53,946	53,946
Other GAS securities	104,324	371,698	476,022	567,260
Total GAS securities	211,213	507,739	718,952	806,189
Other Securities	8,485	3,830	12,315	50,980
Total Investments	\$219,698	\$ 511,569	\$ 731,267	\$857,169

Debt Issuance Suspension Period (DISP). During the DISP, which began on May 16, 2015, and continued until November 16, 2015, the U.S. Treasury took extraordinary measures to avoid exceeding the statutory debt limit. Section 8348 of Title 5, U.S. Code, authorizes the Secretary of the Treasury to suspend additional investments of Treasury securities in the CSRDF if such additional investment could not be made without causing the public debt of the United States to exceed the public debt limit. During this period, OPM could not invest in government securities; the amount suspended, \$140.6 billion for the CSRDF, was recorded in Fund Balance with Treasury instead of Investments in Government Securities, which resulted in a decrease in Total Investments.

NOTE 6 - PLAN TERMINATION

Since the Plans have been established by an act of Congress, they cannot be terminated unless legislation should be enacted to do so. As there is no anticipation that such legislation will be introduced, the Plans are expected to continue indefinitely.

NOTE 7 - CONTINGENCIES

Certain claims, lawsuits, and complaints have been filed against the Fund. It is the opinion of the administrator and OPM's General Counsel that the resolution of these matters would not materially affect the financial position or the results of operations of the Fund.

NOTE 8 - TAX STATUS

The Fund is not subject to income taxes by Federal statute.

NOTE 9 – SUBSEQUENT EVENTS

During the DISP, OPM was restricted in the amounts to invest in Government securities. The amount suspended was \$140.6 billion (CSRDF). In accordance with Section 8348 (j)(4), the Federal Government is required to pay both the

CSRDF the amount of "forgone principal" and "foregone interest. As of September 30, 2015, the CSRDF amount of "foregone principal" and "forgone interest" receivable was \$231.1 million and \$452.1 million. The "forgone principal and foregone interest" receivable was paid on December 31, 2015.

Actuarial Section

General Information

Report for the Fiscal Year ended September 30, 2015

1. Name of plan:

The Civil Service Retirement and Disability Fund, consisting of two components: Civil Service Retirement System (CSRS) and Federal Employees' Retirement System (FERS).

2. Name and address of plan sponsor:

U.S. Office of Personnel Management 1900 E Street, NW Washington, DC 20415-0001

3. Type of plan entity:

Single-employer plan.

4. Date plans were established:

CSRS was established on May 22, 1920; FERS, on June 6, 1986.

5. Plan participants at beginning of fiscal year (9/30/2014):

Participants	CSRS	FERS	Total
Active employees*	188,000	2,465,000	2,653,000
Separated employees entitled to deferred benefits	6,000	44,000	50,000
Annuitants:			
Retirees	1,469,000	590,000	2,059,000
Survivors	511,000	54,000	565,000
Total annuitants	1,980,000	644,000	2,624,000

6. Type of plan:

Defined benefit. FERS also has a defined contribution component (the Thrift Savings Plan), which is not part of the Civil Service Retirement and Disability Fund.

7. Administrative costs:

Administrative costs are borne by the Fund.

8. In this plan year, was the plan merged or consolidated into another plan or were assets or liabilities transferred to another plan?

No.

9. Funding arrangement:

Trust Fund.

10. Date of most recent actuarial valuation:

September 30, 2014

^{*} Number of employees determined on a full-time equivalent basis, includes those employees on leave without pay who retain coverage. See Table 6 for additional detail.

11. Actuarial cost method:

Actuarial valuations are performed using an aggregate entry-age normal cost method.

The CSRS Board of Actuaries, established by 5 U.S.C. 8347(f), provides recommendations regarding methods and assumptions. For the fiscal year ended September 30, 2015, the members of the Board are:

Thomas S. Terry, Chair Douglas C. Borton Edwin C. Hustead

12. Actuarial assumptions:

- A. Economic:
 - 1. Rate of return on Plan investments: 5.25 percent.
 - 2. Rate of general salary increase: 3.25 percent, plus individual merit increases based on Plan experience.
 - 3. Inflation rate: 3.00 percent. Assumed FERS annuitant COLA: 2.40 percent
- B. Decrements (See Table 7 for additional detail):
 - 1. Basis of mortality assumptions: Plan experience
 - 2. Normal Retirement age*:
 - a. CSRS:

55 with 30 years of service

60 with 20 years of service

62 with 5 years of service

b. FERS:

56 with 30 years of service (will transition to age 57)

60 with 20 years of service

62 with 5 years of service

- 3. Basis of withdrawal assumptions: Plan experience.
- 4. Basis of disability assumption: Plan experience.

13. Major Plan Provisions:

See Table 8.

⁻

^{*} Certain special groups may retire at younger ages.

Actuarial Valuation of the Civil Service Retirement and Disability Fund

Since the Civil Service Retirement and Disability Fund (CSRDF) is available to pay both the Civil Service Retirement System (CSRS) and the Federal Employees' Retirement System (FERS) benefits, it comprises a single retirement plan, even though there are two different benefit tiers and funding methods, and the activities associated with each tier are accounted for separately. The results of the actuarial valuation for plan participants as of September 30, 2014 are shown for CSRS and FERS on a combined basis in Table 1. Table 1B shows the projected future cash flows associated with these participants. Table 2 shows the total combined cash flows for the CSRDF as a whole assuming future new entrants into FERS; Table 3 and Table 4 show these past and future projected cash flows separately for FERS and CSRS.

Employee and Annuitant Population

Essentially, employees who have been hired since December 31, 1983, are covered under FERS. Those CSRS employees not automatically transferred to FERS were given an opportunity to elect FERS during an open enrollment period from July 1, 1987, through December 31, 1987, and during a second open enrollment period from July 1, 1998 through December 31, 1998.

The actuarial valuation of the CSRDF is based on the employee and annuitant populations as of September 30, 2014. There were a total of 2,653,000 employees as of this date, determined on a full-time equivalent basis, including 2,465,000 covered under FERS. The balance of 188,000 employees is covered under CSRS.

The inactive population as of September 30, 2014, includes: 2,059,000 retired employees (average age 71); 468,000 spouse survivors of annuitants; 79,000 spouse survivors of employees; 18,000 child survivors; and 50,000 separated employees entitled to deferred benefits.

Economic and Demographic Assumptions

The actuarial valuation presented in Table 1 is based on "dynamic" economic assumptions that explicitly take into account expected future inflation and general salary increases.

On July 13, 2012, the Board of Actuaries recommended adoption of the following long term economic assumptions:

- 3.00 percent inflation rate:
- 2.40 percent rate of FERS annuitant cost-of-living adjustments;
- 3.25 percent rate of general salary increase; and
- 5.25 percent interest rate

These economic assumptions are selected to be used primarily for funding purposes and for the long term projections of the system reflected in this report. In recommending the assumed rates the Board considers long term history as well as the recent and anticipated future economic environment. The inflation assumption was selected in consideration of long term inflation history, the recent period of sustained low inflation and potential future inflationary pressure including that created by the federal budgetary environment. The assumed rate of FERS annuitant cost-of-living adjustments (COLAs) is 80 percent of the assumed inflation rate, which was based on the application of the FERS COLA formula to observed long term inflation history. The general salary increase rate was selected in consideration of the long term history of real federal general salary increases relative to inflation, recent federal salary increase trends and the expected impact of the future federal budgetary environment. The interest rate assumption represents a long term expected rate of return, encompassing returns on future investments as well as returns on the current investment schedule of plan assets. The assumption was selected in consideration of historical real rates of return relative to inflation, current rates of return, the composition of CSRDF investments and the expected sensitivity of future Treasury

rates to future global market forces and federal budgetary factors. The interest rate assumption is developed in recognition that plan assets are valued at par for determining the unfunded actuarial liabilities. At the assumed valuation interest rate, discounting the scheduled principal and coupon payments of invested plan assets would currently produce a present value that is less than par value. However, the Board would expect to revisit the selection of the interest rate assumption were the asset valuation method revised from valuation at par.

At its meeting on July 13, 2012, the Board of Actuaries recommended the adoption of long term demographic assumptions based on the results of an experience study conducted by OPM. The Board of Actuaries recommended certain revisions to the demographic assumptions at its meeting on June 18, 2013. The demographic assumptions are generally based on actual experience under the plan averaged over the most recent ten years. The choice of the 10-year experience period reflects a balance between using the most recently available data to best represent current expected behavior within the system, and sufficient exposure to historical data in order to soften the effects of any short term fluctuations.

CSRS is a closed population so certain CSRS assumptions are based on earlier experience. Rates of retirement for longer service FERS employees are estimated due to lack of observed historical experience. Rates of early and involuntary retirement are based on a 20-year experience period, assumed to be more representative of long term expectations than the historically low experience observed during the most recent 10-year period. Assumed refund rates for FERS employees terminating with 20 or more years of service are based on the most recent 10 year experience; rates for FERS employees terminating with less than 20 years of service were developed to produce new deferred annuity amounts approximating recent averages.

Mortality rates incorporate projected generational mortality improvement for employees, survivors and non-disabled retirees. An ultimate 1.0 percent annual rate of mortality improvement (less than 1.0 percent above age 90) is assumed beginning in fiscal year 2020. Assumed mortality improvement prior to 2020 grades linearly from experience-based improvement factors, which are given 100 percent weight in FY 2010, to the ultimate rate of 1.0 percent that is given 100 percent weight in 2020 and beyond. The Aggregate Entry Age Normal Cost Percentages are determined using an assumed new entrant distribution. The assumed Survivor and Non-Disabled Annuitant mortality rates for the normal cost percentage calculation are the rates projected to year 2031 for the CSRS Normal Cost Percentage, 2044 for FERS, 2056 for FERS-RAE and 2056 for FERS-FRAE. The assumed employee mortality rates for calculation of the normal cost percentage are those projected to year 2014 for CSRS and FERS, and year 2024 for FERS-RAE and FERS-FRAE.

Employee and employing agency contributions are paid for employees in active pay status. The assumed percentage of payroll on leave without pay for which no contributions are paid is 2.6%. Administrative expenses are assumed to equal 0.27% of benefits.

This valuation assumes that no changes to assumptions are currently necessary to reflect expected future phased retirement experience as allowed under the Transportation Funding Bill enacted in July 2012. This valuation also reflects no changes to assumptions resulting from the June 2013 Supreme Court ruling on the Defense of Marriage Act (DOMA) which permits CSRS and FERS retirees to elect an annuity reduction to provide a survivor benefit to their same sex spouse.

The demographic rates are displayed in Table 7.

The economic and demographic assumptions recommended for adoption at the July 13, 2012 meeting of the Board of Actuaries, with revisions recommended at the June 18, 2013 Board meeting, were first effective for the September 30, 2012 actuarial valuation. At its meeting on July 24, 2015, the Board recommended use of these assumptions for the current valuation.

Dynamic Normal Cost

The dynamic normal cost is the level percentage of pay which would have to be contributed for a typical group of new employees over their entire working careers in order to fully finance, with interest, all of their retirement benefits, based on dynamic economic assumptions. FERS is funded under a dynamic entry age normal funding method as prescribed in Chapter 84 of Title 5, United States Code, and employees and agencies together contribute the full amount of the dynamic normal cost.

Under FERS, the dynamic normal cost is 14.5 percent of pay for regular employees, as determined according to the actuarial assumptions used for this valuation. The dynamic normal cost for CSRS regular employees is 29.3 percent of pay. However, CSRS is financed under a statutory funding method that does not directly take into account the cost of benefit increases that are due to expected future inflation. Employees and non-Postal agencies each contribute 7.0 percent of pay for CSRS.

If all agencies including the Postal Service were to contribute the full dynamic normal cost for CSRS, less employee contributions, agency contributions for CSRS employees would have totaled approximately \$3.4 billion in Fiscal Year 2014. This assumes agency contribution rates determined under assumptions consistent with those in effect for FERS for FY 2014.

Unfunded Actuarial Liability

The unfunded actuarial liability is a projection of the amount which, if deposited in the Fund, would fully finance the total cost of the CSRS and FERS retirement benefits for the current, closed group of employees and annuitants, assuming that the full normal cost is contributed over the balance of the employees' working careers. As of September 30, 2014, the unfunded actuarial liability amounted to \$804.3 billion. It represents the difference between the par value of net assets on September 30, 2014, \$858.6 billion, and that which would theoretically be the Fund's net assets had the full normal cost been contributed over the entire working careers of all current employees and annuitants.

In Table 1, the unfunded actuarial liability is expressed as:

- (1) the actuarial present value of future benefits;
- *less* (2) the present value of future normal cost contributions;
- *less* (3) the net assets in the fund.

The actuarial present value of future benefits is the value of plan benefits that are expected to be paid in the future to current employees and annuitants stated in today's dollars, i.e., future amounts discounted for the time value of money. It assumes that current employees will continue to earn benefits over their expected future working lives, that their salaries will increase by the assumed salary increases and that annuities will rise based on the assumed Cost of Living Allowances (COLAs).

The present value of future normal costs is the value, in today's dollars, of the future normal cost contributions to be made over the expected future working lifetimes of all current employees. In Table 1, the present value of future normal cost contributions is determined separately for CSRS and FERS. For CSRS, it is based on the CSRS dynamic normal cost which for most employees is 29.3 percent; and for FERS, it is based on the FERS normal cost which for most employees is 14.5 percent.

Different normal cost percentages apply to certain groups within CSRS and FERS with special retirement system provisions (e.g. Law enforcement). The additional actuarial liability attributable to enhanced retirement provisions for active employees as of September 30, 2014 amounted to \$0.6 billion for CSRS and \$29.9 billion for FERS.

Funding Provisions for CSRS

The CSRS has been financed under a statutory funding method passed by Congress in 1969. This funding method is based on the "static" economic assumptions of no future inflation, no future general schedule salary increases, and a 5.00 percent interest rate.

Separate CSRS funding provisions for the Postal Service were enacted under the Postal Civil Service Retirement System Funding Reform Act of 2003 (P. L. 108-18) and amended by the Postal Accountability and Enhancement Act of 2006 (P.L. 109-435). Under current law, the assets and liabilities of the Postal Service under CSRS are accounted for separately, retroactive to July 1, 1971, which was the date the Postal Service became independent.

Under P.L. 108-18, the Postal Service was liable for the cost of all benefits attributable to post-1971 service, including benefits attributable to military service, and it was required to contribute the full dynamic normal cost for CSRS, and to finance any unfunded liabilities. Under the 2006 amendments, the liability for military service benefits was transferred to the Treasury, and the Postal Service share of the CSRS assets was defined to include all Postal Service contributions since June 30, 1971, less benefits paid to current and former Postal employees that are attributable to post-1971 civilian service, accumulated with interest at the historical rates earned by the entire CSRS fund. Under these amendments, the assets attributable to the Postal Service as of September 30, 2006, exceeded its actuarial liabilities, and the Postal Service agency contributions which had been scheduled under P.L. 108-18 were cancelled starting September 30, 2006. The surplus as of September 30, 2006, which amounted to \$17.1 billion, was transferred to a Postal Health Benefits Fund on June 30, 2007, to help finance Postal Service post-retirement health care benefits. Any future CSRS surplus in the Postal fund will be transferred to the Postal Service Retiree Health Benefits Fund as of September 30, 2025, 2035 or 2039. Beginning in 2017, the Postal Service also is required to amortize any additional unfunded actuarial liabilities which may arise. Postal CSRS employees continue to contribute 7.0 percent of pay.

Under the static funding method, the Postal Service had been making 30-year amortization payments to cover the cost of salary increases for Postal employees, and 15-year amortization payments for the cost of COLAs paid to Postal annuitants. These 15-year and 30-year Postal amortization payments were cancelled under P.L. 108-18 starting in fiscal year 2003.

Under CSRS, regular employees contribute 7.0 percent of pay. Law enforcement officers and firefighters, and Congressional employees contribute an extra 0.5 percent of pay, and Members of Congress an extra 1.0 percent of pay. Non-Postal agencies match the employee contributions.

Under the static funding method for CSRS, which remains in effect for non-Postal employees, the Treasury pays interest on any static unfunded liabilities for CSRS benefits attributable to civilian service that are not being financed by the Postal Service. The Treasury also makes payments to amortize, over a 30-year period, any increases in the static unfunded liability due to salary increases for non-Postal employees that occurred during the year. In addition the Treasury pays the cost of CSRS benefits attributable to military service for both Postal and non-Postal employees that were paid out during the year. In fiscal year 2007 the Treasury made a retroactive payment to cover military service benefits that previously had been attributed to the Postal Service for FY2003 through FY2006.

The static unfunded liability for non-Postal CSRS was \$412.9 billion as of September 30, 2014, as determined under the most recently revised demographic assumptions and assuming an interest rate of 5.00 percent with no future inflation and no future general salary increases. Based on the statutory CSRS funding provisions, the Treasury made the following payments to the CSRDF on September 30, 2015:

Interest on Static Unfunded Liability (UL): \$20.645 billion 30-year Amortization of Increases in Static UL: \$8.450 billion Military Service Payment: \$3.758 billion Other CSRS Funding Provisions: \$0.063 billion

Funding Provisions for FERS

Under FERS, employees and agencies contribute the full dynamic normal cost. This normal cost is for the defined benefit plan only, and does not include the cost of Social Security or the Thrift Plan. Most FERS employees hired before January 1, 2013, contribute a percentage of salary that is equal to the contribution rate for CSRS employees, as set forth above, less the 6.2 percent tax rate applicable under the Old Age, Survivors and Disability Insurance (OASDI) portion of Social Security. Thus for these regular employees in FERS, the contribution rate is 0.8 percent of the employee's total salary. Employees generally hired during calendar year 2013 who are subject to FERS-RAE contribute an additional 2.3 percent of salary above the CSRS rate. Employees generally hired after December 31, 2013, subject to FERS-FRAE contribute an additional 3.6 percent of salary above the CSRS rate. An extra 0.5 percent of pay is contributed by certain employees with enhanced benefit provisions (e.g. air traffic controllers, law enforcement officers and firefighters). Agencies contribute the normal cost of FERS, less the employee contributions. Non-Postal agencies are required to

contribute above the normal cost for employees under FERS-FRAE, with the excess used to address the CSRS unfunded actuarial liability.

Under FERS, any supplemental liabilities are amortized over 30 years. The payments on the initial supplemental liability as of September 30, 1988, began on September 30, 1989. Each year thereafter, any change in the supplemental liability is amortized by means of a new series of 30-year payments. Increases in liabilities attributable to non-Postal employees are made by the Treasury. Any supplemental liabilities attributable to Postal employees are amortized by separate 30-year payments made by the Postal Service. In order to determine the value of FERS assets attributable to Postal employees, an account is maintained that is credited with net contributions for Postal employees with interest at the same rate as is earned by the entire FERS fund. A negative supplemental liability generates negative amortization payments. Negative payments are used only to offset any positive payments that have already been scheduled. If the net assets exceed the actuarial liability, all remaining amortization payments are cancelled. Apart from cancellation of any future amortization payments there is no provision in the law for disposition of any FERS surplus either for non-Postal or Postal participants; in this case the excess assets remain in the fund where they accrue interest and are available to offset potential future losses.

A Treasury payment for FERS of \$3.199 billion was made on September 30, 2015. This amount included a new 30-year payment of \$0.897billion to amortize a supplemental liability of \$13.4 billion as of September 30, 2014, for non-Postal FERS participants as determined according to the actuarial assumptions first recommended for adoption at the June 18, 2013 meeting of the Board of Actuaries.

A payment of \$0.241 billion was due from the Postal Service to the CSRDF on September 30, 2015. This amount included a new 30-year payment of \$0.234 billion to amortize a supplemental liability of \$3.5 billion as of September 30, 2014, for Postal FERS participants as determined according to the actuarial assumptions first recommended for adoption at the June 18, 2013 meeting of the Board of Actuaries.

Projected Flow of Plan Assets

Tables 2 and 2A show a 75-year projection of the actual funding for the CSRDF under conditions of expected future inflation. A sufficient number of new employees are assumed to be hired each year so that the total employee population remains constant. Along with this consolidated projection for the entire CSRDF, there are also separate tables for the FERS population (Tables 3 and 3A) and CSRS population (Tables 4 and 4A).

The Projected Flow of plan assets calculated in Tables 2 and 3 for future years reflects the provisions for FERS Revised Annuity Employees (FERS-RAE) and FERS Further Revised Annuity Employees (FERS-FRAE). FERS-RAE, as established by the Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96), provides for increased employee contributions and lower agency contributions for employees first hired during calendar year 2013. P.L. 112-96 also requires that Congress Members and Congressional staff initially employed after December 31, 2012, will accrue FERS benefits according a regular, rather than enhanced, benefit formula. FERS-FRAE, as established by the Bipartisan Budget Act of 2013 (P.L. 113-67), provides an additional increase to employee contribution rates for employees first hired after December 31, 2013. The FERS-FRAE agency contributions for non-Postal employing agencies are generally held at the same rate as for FERS-RAE; P.L. 113-67 requires that FERS-FRAE contributions in excess of the normal cost be used to address the unfunded actuarial liability for CSRS. Excess agency contributions for FERS-FRAE expected to be allocated to CSRS are included in the projected Agency Contributions shown for FERS in Table 3 and in the projected transfer payments from FERS to CSRS shown in Tables 3 and 4. In this projection the excess agency contributions for FERS-FRAE cease in the year 2059.

The CSRS assets shown in Table 4 represent the combined Postal and non-Postal share. In this projection the CSRS assets attributable to non-Postal employees are depleted in the year 2022. Because the CSRS benefits continue to be paid from the assets of the CSRDF, the assets attributable to non-Postal FERS employees (as shown in Table 3) will be reduced each year by the amount that the non-Postal CSRS benefits exceed the non-Postal CSRS contributions. The Postal Service is required to make payments to amortize the dynamic actuarial liabilities for the Postal share of CSRS benefits, so the Postal share of CSRS assets is not projected to be depleted until all benefits to Postal annuitants have been paid. The total assets of the CSRDF as projected in

Table 2, including both CSRS and FERS, are expected to continue to grow throughout the term of the projection under the existing statutory funding provisions.

These tables also include a projection of the dynamic unfunded actuarial liability (UAL) under CSRS and FERS. These actuarial liabilities are defined in the same manner as in Table 1 but they apply to future years. A projection of the total unfunded actuarial liability for CSRS and FERS combined is shown in Tables 2 and 2A. The projected future assets and unfunded actuarial liabilities when shown separately for FERS (Tables 3 and 3A) and CSRS (Tables 4 and 4A) are affected by projected future asset balance transfers from FERS to CSRS. When the non-Postal CSRS account is depleted, projected to occur in 2022, the resulting transfers from the FERS account to the CSRS account create supplemental liabilities for the non-Postal FERS account. These supplemental liabilities for non-Postal FERS must then be amortized by means of 30-year payments made by the Treasury. The projections in Tables 3 and 3A reflect increases in the FERS UAL for years 2022 and beyond, due to the use of assets in the FERS account for payment of CSRS benefits.

Opinion of the Enrolled Actuary

Civil Service Retirement and Disability Fund

Actuarial Valuation of the Civil Service Retirement and Disability Fund as of September 30, 2014

The purpose of this report is to represent the actuarial valuation of the Civil Service Retirement and Disability Fund (CSRDF), which includes both the Civil Service Retirement System (CSRS) and the Federal Employees' Retirement System (FERS), prepared according to the methodology and long term assumptions used for FERS funding. The methodologies, assumptions and results may differ from those reflected in the actuarial liabilities reported in the U.S. Office of Personnel Management's Annual Financial Statement.

This actuarial valuation incorporates the economic assumptions first recommended for adoption at the July 13, 2012 meeting of the Board of Actuaries. The long-term economic assumptions are: 3.00 percent inflation rate; 3.25 percent rate of general salary increase; and 5.25 percent rate of long-term interest. The demographic assumptions used for this actuarial valuation are those recommended for adoption at the July 13, 2012 meeting of the Board of Actuaries, as modified at the June 18, 2013 Board meeting. At its meeting on July 24, 2015, the Board of Actuaries recommended use of these assumptions for the actuarial valuation as of September 30, 2014. This report assumes a 1.0 percent general salary increase for 2015 based on the actual increase in the General Schedule salary tables. A 1.70 percent CSRS annuitant COLA and 1.70 percent FERS annuitant COLA are assumed in year 2015 based on the actual COLAs received.

The populations used for this actuarial valuation include employees hired during calendar year 2013 according to the FERS "Revised Annuity Employee" provisions of the Middle Class Tax Relief and Job Creation Act of 2012; and employees generally hired after calendar year 2013 according to the FERS "Further Revised Annuity Employee" provisions of the Bipartisan Budget Act of 2013.

This statement has been prepared in accordance with generally accepted principles and practices of the Actuarial Standards Board and to the best of my knowledge fairly reflects the results of the actuarial valuation. In preparing this statement I have relied on the financial information provided by OPM's Office of the Chief Financial Officer, on the population data provided by OPM's Office of Retirement Services, Chief Information Office and Data Analysis Group, and on the contributions of other OPM actuaries.

In my opinion, the actuarial methods and assumptions used in preparation of this report are reasonable in the aggregate and reflect a fair estimate of anticipated experience under the plan, both the CSRS and the FERS, based on provisions of the plan in effect at the beginning of fiscal year 2015. Future actuarial reports may reflect different results due to such factors as: actual experience that has differed from assumptions, future revisions to actuarial assumptions, and future changes to plan provisions. To the best of my knowledge, the report is complete and accurate.

By:

Gregory Kissel Enrolled Actuary # 14-6967 U.S. Office of Personnel Management 1900 E Street, NW Washington, D.C. 20415-3000 (202) 606-0722

Email: actuary@opm.gov

Table 1A Actuarial Status Information as of Beginning of Plan Year (Dollars in Billions)

Unfunded Actuarial Accrued Liability – September 30, 2014

	CSRS	FERS	Total
1. Actuarial Present Value of Future Benefits			
(a) Annuitants on roll	\$935.3	\$158.9	\$1,094.2
(b) Separated Employees	1.6	3.5	5.1
(c) Active Employees	176.6	776.7	953.3
Total	1,113.5	939.1	2,052.6
2. Less: Present Value of Future Normal Costs:	19.5	370.2	389.7
3. Actuarial Accrued Liability	1,094.0	568.9	1,662.9
4. Assets (at Par Value)	339.6	519.0	858.6
5. Unfunded Actuarial Liability ¹	\$754.4	\$49.9	\$804.3

Normal Cost as a Percentage of Covered Payroll²:

	CSRS	FERS	FERS-RAE	FERS-FRAE
Employee	7.0%	0.8%	3.1%	4.4%
Employing Agency	7.0%	13.7%	11.9%	11.9%
Other/(Excess)	15.3% ³	0.0%	0.0%	$(1.2\%)^4$
Total Normal Cost %	29.3%	14.5%	15.0%	15.1%

 $^{^1}$ A portion of the CSRS unfunded actuarial liability will be met with transfers from FERS assets; see Technical notes. 2 Different rates are applicable for special groups; see Technical Notes.

³ The combined employee and agency contribution for CSRS is generally less than the full dynamic normal cost percentage.

⁴ Non-Postal agencies are required to contribute at the RAE rate for FRAE; contributions in excess of the normal cost percentage are transferred to the CSRS account.

Table 1A

Technical Notes

The date of the actuarial valuation is the beginning of the fiscal year (i.e. the end of the previous fiscal year). Thus, the actuarial liabilities reported for fiscal year 2015 are determined as of September 30, 2014. The valuation of the CSRDF as of September 30, 2014, is based on the employee and annuitant populations as of that date.

On a full-time equivalent basis, there were a total of 2,653,000 active employees as of September 30, 2014:

CSRS-Offset:	27,000
CSRS:	161,000
CSRS Total:	188,000
FERS-Elect:	18,000
	· · · · · · · · · · · · · · · · · · ·
FERS:	2,256,000
FERS-RAE:	121,000
FERS-FRAE:	70,000
FERS Total:	2,465,000
CSRS+FERS Total:	2,653,000

The present values of future benefits and normal costs as of September 30, 2014, are based on long term economic assumptions recommended for adoption at the July 13, 2012 meeting of the Board of Actuaries, and on demographic assumptions recommended for adoption on July 13, 2012 and modified at the June 18, 2013 meeting of the Board of Actuaries. The long term economic assumptions are 3.00 percent inflation; 2.40 percent FERS annuitant Cost of Living Adjustment (COLA), 3.25 percent annual general salary increases, and 5.25 percent interest. A general salary increase of 1.00 percent is assumed in year 2015 to match the actual increase in federal General Schedule pay tables. A 1.70 percent CSRS annuitant COLA and 1.70 percent FERS annuitant COLA are assumed in year 2015 based on the actual COLAs received. There were no changes to long term economic assumptions or demographic assumptions from those used for the prior year's actuarial valuation.

The CSRS normal cost is defined as the level percentage of pay necessary to fully fund all retirement benefits for a typical group of new Federal employees who are assumed to be covered under CSRS, even though all new Federal employees are now actually covered under FERS. For FERS, future agency contributions are assumed to equal the full normal cost less the employee contribution. For regular FERS employees the agency contribution equals the full normal cost of 14.5 percent less the 0.8 percent employee contribution, or a total of 13.7 percent of pay. For regular FERS-RAE the agency contribution equals the full normal cost of 15.0 percent less the 3.1 percent employee contribution, or a total of 11.9 percent of pay. The employee contribution for FERS-FRAE is 1.3 percent greater than for FERS-RAE; for regular FERS-FRAE the employee contribution rate is 4.4 percent. By statute, the non-Postal agency contribution rate for FERS-FRAE equals the agency contribution rate for FERS-RAE. Thus the combined agency and employee contribution for non-Postal FERS-FRAE exceeds the FERS-FRAE normal cost. For the Postal Service, the regular FERS-FRAE the agency contribution for regular FERS-FRAE equals the full normal cost of 15.1 percent less the 4.4 percent employee contribution, or a total of 10.7 percent of pay.

The September 30, 2014, unfunded actuarial liability of \$754.4 billion shown for CSRS in Table 1 consists of an unfunded actuarial liability of \$735.0 billion for the non-Postal CSRS account and an unfunded actuarial liability of \$19.4 billion for the Postal CSRS account. The Table 1 September 30, 2014, unfunded actuarial liability of \$49.9 billion for FERS consists of an unfunded actuarial liability of \$46.3 billion for the non-Postal FERS account and an unfunded actuarial liability of \$3.6 billion for the Postal FERS account. In addition to employee contributions and employing agency contributions, funding payments to the CSRDF from the Treasury for fiscal year 2015 totaled approximately \$32.9 billion for CSRS and approximately \$3.2 billion for FERS. Funding payments of approximately \$0.2 billion were due from the Postal Service for FERS for fiscal year 2015.

Supplemental liabilities under FERS are amortized by 30-year payments to be made by the Treasury for non-Postal employees, and by the Postal Service for Postal employees. The supplemental liability is determined by subtracting the present value of any remaining 30-year payments that have already been scheduled from the amount of the unfunded actuarial liability. The CSRS unfunded actuarial liability will be met with future Treasury payments that are required under current CSRS statute, excess contributions required for FERS-FRAE from non-Postal agencies, plus transfers from the non-Postal FERS account to the CSRS account. The transfers create supplemental liabilities for the non-Postal FERS account, which are then amortized by means of thirty-year payments made by the Treasury to the FERS account.

Table 1B Projected Future Cash Flow for Current Participants

The present value of future benefits and expenses, and the present value of future normal costs, shown in Table 1 are based on projected future cash flow for participants in CSRS and FERS as of September 30, 2014. The projected future cash flow is as follows:

				(Dollars in	Millions)			
		CSF				FEF		
		Benefits:	Benefits:			Benefits:	Benefits:	
	Benefits:	Separated	Active	Normal	Benefits:	Separated	Active	Normal
FY	Annuitants	Employees	Employees	Costs	Annuitants	Employees	Employees	Costs
2015	\$69,375	\$7	\$1,014	\$4,181	\$10.133	\$1	\$1,048	\$29,278
2016	68,828	21	2,732	3,524	10,154	21	2,635	29,298
2017	68,448	35	4,262	2,983	10,200	40	4,347	29,365
2018	68,021	48	5,649	2,511	10,245	60	6,257	29,315
2019	67,540	61	6,894	2,105	10,269	81	8,383	29,161
2020	67,003	73	8,014	1,758	10,275	101	10,716	28,908
2020	,	73 84	9,021	1,738	,	121	,	-
	66,406	94	,		10,300	140	13,223	28,562
2022	65,745	-	9,933	1,209	10,369		15,898	28,122
2023	65,011	103	10,750	992	10,427	157	18,735	27,579
2024	64,195	110	11,482	808	10,469	174	21,711	26,946
2025	63,291	115	12,129	655	10,492	182	24,743	26,268
2026	62,292	119	12,703	527	10,494	192	27,858	25,540
2027	61,191	122	13,213	421	10,478	208	31,167	24,734
2028	59,983	125	13,662	331	10,438	224	34,622	23,867
2029	58,661	127	14,049	257	10,368	239	38,210	22,940
2030	57,221	130	14,381	197	10,268	251	41,905	21,962
2031	55,661	132	14,661	147	10,141	262	45,682	20,937
2032	53,977	133	14,882	106	9,985	273	49,504	19,873
2033	52,170	135	15,052	75	9,799	284	53,356	18,774
2034	50,241	136	15,168	51	9,582	294	57,268	17,635
2035	48,193	137	15,227	33	9,335	303	61,233	16,465
2036	46,032	138	15,236	21	9,060	312	65,205	15,292
2037	43,766	138	15,186	11	8,758	320	69,116	14,127
2038	41,406	138	15,076	6	8,429	327	72,985	12,963
2039	38,963	137	14,908	3	8,077	333	76,756	11,808
2040	36,453	136	14,679	1	7,703	339	80,383	10,669
2041	33,896	134	14,389	0	7,310	343	83,827	9,561
2042	31,313	131	14,037	0	6,902	347	87,028	8,496
2043	28,726	128	13,622	0	6,482	350	89,975	7,476
2044	26,161	124	13,146	0	6,055	352	92,654	6,511
2045	23,643	120	12,609	0	5,626	353	95,018	5,610
2046	21,194	114	12,016	0	5,197	353	97,028	4,790
2047	18,838	108	11,369	0	4,773	352	98,631	4,064
2048	16,594	101	10,677	0	4,359	349	99,815	3,426
2049	14,481	94	9,945	0	3,957	345	100,625	2,868
2050	12,515	87	9,183	0	3,571	340	101,082	2,385
2051	10,707	79	8,400	0	3,203	333	101,190	1,970
2052	9,065	71	7,608	0	2,856	325	100,969	1,617
2053	7,594	63	6,819	0	2,531	315	100,424	1,317
2054	6,294	55	6,043	0	2,229	305	99,571	1,063
2055	5,161	48	5,293	0	1,951	293	98,422	850
2056	4,187	41	4,579	Ö	1,698	279	96,984	670
2057	3,360	34	3,911	Ö	1,468	265	95,264	522
2058	2,668	29	3,297	Ö	1,262	251	93,283	400
2059	2,098	24	2,742	0	1,079	235	91,061	302
2060	1,634	19	2,249	Ö	917	220	88,622	223
2061	1,261	15	1,818	Ö	775	204	85,994	159
2062	966	12	1,449	Ö	652	188	83,197	109
2063	736	9	1,137	0	545	172	80,248	72
2064	560	7	879	0	455	157	77,169	45
2065	426	5	670	0	378	143	73,982	27
2066	327	4	503	0	314	129	70,709	15
2067	254	3	372	0	260	115	67,368	8
2068	201	2	272	0	215	103	63,976	3
2069	163	2	197	0	179	91	60,547	1
_555	100	_	101	9	173	01	30,0-1	' !

Table 1B Projected Future Cash Flow for Current Participants

(Continued)

ı		001	00	(Dollars in	Millions)		20	ı
FY	Benefits: Annuitants	CSI Benefits: Separated Employees	Benefits: Active Employees	Normal Costs	Benefits: Annuitants	FEI Benefits: Separated Employees	Benefits: Active Employees	Normal Costs
2070	\$136	\$1	\$141	\$0	\$ 149	\$81	\$57,094	\$0
2071	116	1	100	0	124	71	53,629	0
2072	102	1	71	0	104	62	50,161	0
2073	92	1	50	0	88	54	46,702	0
2074	85	1	36	0	75 25	46	43,263	0
2075	80	1	27	0	65	40	39,859	0
2076 2077	75 72	0	21 17	0 0	56 49	34 29	36,506 33,222	0 0
2077	68	0	17	0	49	29 25	30,026	0
2078	65	0	13	0	39	25 21	26,938	0
2079	62	0	13	0	35	18	23,978	0
2081	58	0	12	0	31	15	21,167	0
2082	55 55	0	12	0	29	13	18,523	0
2083	52	0	12	0	26	11	16,061	ő
2084	49	Õ	11	ő	24	9	13,793	ő
2085	46	0	11	ő	22	8	11,728	ő
2086	42	Õ	11	ő	20	7	9,872	ő
2087	39	0	10	0	19	6	8,222	0
2088	37	0	10	0	18	5	6,776	0
2089	34	0	9	0	16	5	5,525	0
2090	31	0	9	0	15	4	4,457	0
2091	29	0	9	0	14	4	3,558	0
2092	26	0	8	0	13	4	2,811	0
2093	24	0	8	0	12	3	2,201	0
2094	22	0	7	0	11	3	1,708	0
2095	20	0	7	0	10	3	1,316	0
2096	18	0	6	0	9	3	1,008	0
2097	16	0	6	0	8	3	770	0
2098	14	0	6	0	8	3	589	0
2099	13	0	5	0	7	3	453	0
2100	11	0	5	0	6	3	351	0
2101	10	0	4	0	6	2	277	0
2102	9 7	0	4	0	5	2	223	0
2103	6	0 0	4 3	0 0	4 4	2 2	184 157	0 0
2104 2105	5	0	3	0	3	2	137	0
2105	5 5	0	3	0	3	2	123	0
2107	4	0	2	0	3	2	113	0
2107	3	0	2	0	2	2	106	0
2108	3	0	2	0	2	2	99	0
2110	2	0	2	0	2	2	94	0
2111	2	0	1	0	1	1	89	ő
2112	1	0	1	0	i	1	84	ő
2113	1	0	1	ő	i 1	1	79	ő
2114	1	Ö	1	Ö	1	1	74	Ö

Table 1C Statement of Pension Expense

The actuarial liabilities shown in Table 1 are based on actuarial assumptions about future economic and demographic factors. Future statements of actuarial liabilities may reflect different results due to actual experience that has differed from assumptions, future revisions to actuarial assumptions, and potential future revisions to plan provisions. The actuarial liabilities as of September 30, 2014 as shown in Table 1 reflect an overall actuarial gain of \$6.7 billion from that which would have been expected based on the prior year report. This consists of an actuarial gain of \$10.4 billion for CSRS and an actuarial loss of \$3.7 billion for FERS. The actuarial gain/loss is due to experience that has varied from assumptions used for the prior report. The actuarial liabilities as of September 30, 2014 reflect actuarial assumptions that are unchanged from those used in the prior year report.

Dollars in Billions

	CSRS	FERS	Total
1. Actuarial Accrued Liability (9/30/2013)	\$1,112.2	\$517.4	\$1,629.6
Expense			
Normal Cost	5.1	29.8	34.9
Interest Expense	56.7	27.7	84.4
Loss(Gain) Due to Experience	(10.4)	3.7	(6.7)
Loss(Gain) Due to Plan Amendments	0.0	0.0	0.0
Loss(Gain) Due to Assumptions	0.0	0.0	0.0
2. Plus: Total Expense	51.4	61.2	112.6
3. Less: Amounts Paid	69.6	9.7	79.3
4. Actuarial Accrued Liability (9/30/2014)	1,094.0	568.9	1,662.9

Table 1D Present Value of Future Benefits Obligations

The present value of future benefits shown in Table 1 is \$2,052.6 billion as of September 30, 2014 (consisting of \$1,113.5 billion for CSRS and \$939.1 billion for FERS). These benefits obligations are projected to be met under existing statutory funding provisions as follows:

D 437 L 66 4 L 20 2014	(do	(dollars in billions)					
Present Values as of September 30, 2014	CSRS	FERS	Total				
PV Future Contributions from Employee & Employing Agency:	\$ 8.3	\$370.2	\$378.5				
+ PV Fut. Excess Contrib. from Employing Agency for FERS-FRAE:	0.0	35.5	35.5				
+ PV Future Treasury Amortization Payments (already established):	77.0	46.3	123.3				
+ PV Future Treasury Amortization Payments (to be established):	7.4	241.4	248.8				
+ PV Future Postal Service Amortization Pmts (already established):	0.0	3.6	3.6				
+ PV Future Postal Service Amortization Pmts (to be established):	19.4	0.0	19.4				
+ PV Future Treasury Payments of Interest on Static UAL:	326.0	0.0	326.0				
+ PV Future Treasury Payments for Military Service costs:	58.9	0.0	58.9				
PV Future Statutory Funding Payments:	\$497.0	\$697.0	\$1,194.0				
+ Assets (at Par Value):	339.6	519.0	858.6				
PV Total Amt Available under Statutory Funding Provisions:	\$836.6	\$1,216.0	\$2,052.6				
+ PV Future Transfers to CSRS from Non-Postal FERS:	276.9	(276.9)	0.0				
PV Future Benefits:	\$1,113.5	\$939.1	\$2,052.6				

TABLE 2: Past and Projected Flow of Plan Assets (Combined CSRS and FERS Systems)

(Dollars in Billions)

Fiscal Year	Employee Contributions	Agency Contributions	Other Government Contributions	Investment Income	Total Income	Total Expense	Net Assets End of Year	Dynamic Total UAL EOY	Combined Payroll
PAST FLOW									
1987	4.8	5.9	17.0	15.9	43.6	(25.8)	178.7	486.0	74.2
1988	4.5	6.7	17.5	17.9	46.7	(28.3)	197.1	508.3	79.6
1989	4.5	7.3	18.1	19.4	49.3	(29.7)	216.7	548.3	83.4
1990	4.5	7.9	19.4	20.8	52.7	(31.4)	238.0	568.7	87.6
1991	4.6	8.5	21.0	22.7	56.8	(33.2)	261.6	593.8	92.3
1992	4.7	9.3	21.8	24.2	60.0	(33.2)	288.4	599.7	98.0
1993	4.7	9.7	23.0	25.5	62.9	(35.1)	317.4	540.1	100.1
1994	4.6	10.1	22.7	26.3	63.8	(36.5)	344.3	540.6	102.8
1995	4.5	9.9	23.2	28.5	66.1	(38.6)	371.3	545.8	104.9
1996	4.4	10.4	23.4	29.5	67.7	(39.9)	398.9	512.4	107.8
1997	4.4	10.7	24.5	30.9	70.4	(41.8)	427.5	505.6	109.1
1998	4.3	11.3	24.7	32.5	72.8	(43.2)	457.1	496.1	109.6
1999	4.3	11.9	24.8	32.6	73.7	(44.0)	486.8	506.6	115.7
2000	4.7	12.4	25.1	33.8	76.0	(45.2)	521.5	509.5	120.8
2001	4.4	12.9	25.4	35.2	77.9	(47.1)	548.2	510.9	125.2
2002	4.3	13.7	26.0	36.1	80.1	(48.7)	579.5	523.6	131.3
2003	4.3	14.6	21.9	37.0	77.8	(50.0)	607.1	527.1	139.3
2004	4.2	16.2	25.9	35.8	82.1	(52.0)	637.1	534.8	145.6
2005	4.1	17.2	25.9	36.3	83.5	(54.5)	665.9	576.1	151.0
2006	3.9	18.0	28.4	36.6	87.0	(57.6)	695.0	581.8	155.5
2007	3.8	17.4	31.1	37.2	89.5	$(78.1)^*$	706.4	634.5	161.2
2008	3.7	18.8	31.0	37.3	90.8	(63.5)	733.7	674.2	168.9
2009	3.7	20.5	31.5	37.1	92.7	(67.6)	758.7	673.1	181.1
2010	3.6	22.0	33.2	36.4	95.2	(69.3)	784.6	622.3	191.0
2011	3.5	23.9	31.3	35.4	94.1	(70.3)	808.4	761.5	197.3
2012	3.3	24.5	33.1	34.0	94.8	(73.9)	829.1	789.8	196.4
2013	3.3	24.6	33.3	31.4	92.6	(77.1)	844.6	785.0	195.4
2014	3.0	24.8	35.0	30.5	93.3	(79.4)	858.6	804.3	196.0

^{*} Includes a transfer of \$17.1 billion to the Postal Service Retiree Health Benefit Fund on June 30, 2007

TABLE 2: Past and Projected Flow of Plan Assets (Combined CSRS and FERS Systems)

(Dollars in Billions)

	Employee	Agency	Other Government	Investment			Net Assets	Dynamic Total	Combined
Fiscal Year	Contributions	Contributions	Contributions	Income	Total Income	Total Expense	End of Year	UAL EOY	Payroll
PROJECTED FI	LOW								_
2015	\$2.9	\$28.8	\$36.4	\$43.8	\$111.9	\$(81.6)	\$888.9	\$812.5	\$199.5
2016	3.2	29.7	37.0	45.3	115.2	(84.4)	919.7	820.1	205.2
2017	3.5	30.8	39.2	46.9	120.4	(87.4)	952.7	825.4	212.3
2018	3.8	31.9	40.0	48.6	124.3	(90.4)	986.6	829.8	219.6
2019	4.2	32.9	40.7	50.3	128.1	(93.4)	1021.3	833.5	227.0
2020	4.6	34.0	41.3	52.1	132.0	(96.5)	1056.7	836.5	234.7
2021	5.0	35.1	41.8	53.9	135.8	(99.6)	1092.9	838.9	242.7
2022	5.5	36.2	42.3	55.8	139.7	(102.8)	1129.8	840.6	250.8
2023	6.0	37.3	42.8	57.7	143.7	(106.0)	1167.5	841.6	259.2
2024	6.5	38.4	43.6	59.6	148.1	(109.1)	1206.5	841.6	267.8
2025	7.0	39.5	44.4	61.6	152.6	(112.2)	1246.9	840.7	276.8
2026	7.6	40.7	45.3	63.7	157.3	(115.1)	1289.1	838.5	286.2
2027	8.2	41.9	46.1	65.9	162.1	(118.1)	1333.1	835.2	295.8
2028	8.8	43.1	46.9	68.2	167.1	(121.1)	1379.0	830.8	305.8
2029	9.5	44.4	47.6	70.6	172.0	(124.1)	1426.9	825.2	316.1
2030	10.2	45.7	48.1	73.1	177.0	(127.0)	1476.9	818.6	326.7
2035	13.9	52.8	50.2	87.4	204.3	(140.7)	1765.6	769.8	385.3
2040	18.0	61.1	51.7	106.1	236.9	(153.8)	2140.0	691.0	452.9
2045	22.5	71.0	47.9	130.2	271.6	(167.0)	2620.4	589.6	531.0
2050	27.3	82.9	47.1	160.8	318.1	(183.0)	3233.3	466.6	622.9
2055	32.4	97.0	41.3	199.4	370.1	(206.4)	3999.3	316.0	730.5
2060	38.2	105.2	30.2	244.1	417.6	(239.4)	4874.5	183.3	856.2
2065	44.8	123.3	20.7	292.6	481.4	(282.2)	5828.4	99.9	1004.4
2070	52.6	144.9	11.9	346.5	555.9	(334.6)	6889.7	43.1	1179.3
2075	61.8	170.2	5.2	406.5	643.6	(397.0)	8070.6	12.3	1384.8
2080	72.5	199.7	1.2	473.3	746.7	(471.0)	9389.8	1.3	1625.4
2085	85.1	234.2	0.0	548.0	867.3	(559.3)	10864.3	0.0	1906.9
2090	99.8	274.7	0.0	631.0	1005.5	(664.4)	12503.7	0.0	2236.9

TABLE 2A: Past and Projected Flow of Plan Assets (Combined CSRS and FERS Systems)

[Percentage of Total Payroll (CSRS & FERS)]

Fiscal Year	Employee Contributions	Agency Contributions	Other Government Contributions	Investment Income	Total Income	Total Expense	Net Assets End of Year	Dynamic Total UAL EOY	Combined Payroll
PAST FLOW									
1987	6.5%	8.0%	22.9%	21.4%	58.8%	(34.7)%	240.9%	655.0%	100.0%
1988	5.7%	8.5%	22.0%	22.5%	58.7%	(35.6)%	247.7%	638.6%	100.0%
1989	5.4%	8.7%	21.7%	23.3%	59.1%	(35.6)%	259.8%	657.4%	100.0%
1990	5.1%	9.0%	22.2%	23.8%	60.1%	(35.9)%	271.7%	649.2%	100.0%
1991	4.9%	9.3%	22.7%	24.7%	61.6%	(36.0)%	283.5%	643.3%	100.0%
1992	4.8%	9.4%	22.3%	24.7%	61.2%	(33.9)%	294.3%	611.9%	100.0%
1993	4.7%	9.6%	23.0%	25.5%	62.8%	(35.1)%	316.9%	539.6%	100.0%
1994	4.5%	9.8%	22.1%	25.6%	62.1%	(35.5)%	335.0%	525.9%	100.0%
1995	4.3%	9.5%	22.1%	27.1%	63.0%	(36.8)%	354.0%	520.3%	100.0%
1996	4.1%	9.6%	21.7%	27.4%	62.8%	(37.0)%	370.2%	475.3%	100.0%
1997	4.0%	9.8%	22.4%	28.3%	64.5%	(38.3)%	392.0%	463.6%	100.0%
1998	3.9%	10.3%	22.5%	29.7%	66.4%	(39.4)%	417.1%	452.7%	100.0%
1999	3.7%	10.3%	21.5%	28.2%	63.7%	(38.0)%	420.9%	438.0%	100.0%
2000	3.9%	10.2%	20.8%	28.0%	62.9%	(37.4)%	431.8%	421.9%	100.0%
2001	3.5%	10.3%	20.3%	28.1%	62.2%	(37.6)%	437.8%	408.1%	100.0%
2002	3.2%	10.5%	19.8%	27.5%	61.0%	(37.1)%	441.4%	398.8%	100.0%
2003	3.1%	10.5%	15.7%	26.6%	55.9%	(35.9)%	435.9%	378.5%	100.0%
2004	2.9%	11.1%	17.8%	24.6%	56.4%	(35.7)%	437.6%	367.3%	100.0%
2005	2.7%	11.4%	17.2%	24.0%	55.3%	(36.7)%	441.0%	381.5%	100.0%
2006	2.5%	11.6%	18.3%	23.6%	55.9%	(37.1)%	447.0%	374.2%	100.0%
2007	2.4%	10.8%	19.2%	23.1%	55.5%	(48.4)%*	438.2%	393.6%	100.0%
2008	2.2%	11.1%	18.4%	22.1%	53.8%	(37.6)%	434.5%	399.2%	100.0%
2009	2.0%	11.3%	17.4%	20.5%	51.2%	(37.3)%	418.9%	371.7%	100.0%
2010	1.9%	11.5%	17.4%	19.1%	49.8%	(36.3)%	413.0%	327.5%	100.0%
2011	1.8%	12.1%	15.9%	17.9%	47.7%	(35.6)%	409.7%	386.0%	100.0%
2012	1.7%	12.5%	16.9%	17.3%	48.3%	(37.6)%	422.1%	402.1%	100.0%
2013	1.7%	12.6%	17.0%	16.1%	47.4%	(39.5)%	432.2%	401.7%	100.0%
2014	1.5%	12.7%	17.9%	15.6%	47.6%	(40.5)%	438.1%	410.4%	100.0%

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^{*} Includes a transfer of \$17.1 billion to the Postal Service Retiree Health Benefit Fund on June 30, 2007.

TABLE 2A: Past and Projected Flow of Plan Assets (Combined CSRS and FERS Systems)

[Percentage of Total Payroll (CSRS & FERS)]

Fiscal Year	Employee Contributions	Agency Contributions	Other Government Contributions	Investment Income	Total Income	Total Expense	Net Assets End of Year	Dynamic Total UAL EOY	Combined Payroll
PROJECTED FL	OW					-			
2015	1.5%	14.4%	18.2%	21.9%	56.1%	(40.9)%	445.5%	407.2%	100.0%
2016	1.6%	14.5%	18.0%	22.1%	56.1%	(41.1)%	448.2%	399.6%	100.0%
2017	1.6%	14.5%	18.5%	22.1%	56.7%	(41.2)%	448.8%	388.8%	100.0%
2018	1.7%	14.5%	18.2%	22.1%	56.6%	(41.2)%	449.4%	377.9%	100.0%
2019	1.8%	14.5%	17.9%	22.2%	56.4%	(41.2)%	449.8%	367.1%	100.0%
2020	1.9%	14.5%	17.6%	22.2%	56.2%	(41.1)%	450.2%	356.4%	100.0%
2021	2.1%	14.5%	17.2%	22.2%	56.0%	(41.1)%	450.3%	345.7%	100.0%
2022	2.2%	14.4%	16.8%	22.2%	55.7%	(41.0)%	450.4%	335.1%	100.0%
2023	2.3%	14.4%	16.5%	22.3%	55.4%	(40.9)%	450.4%	324.7%	100.0%
2024	2.4%	14.3%	16.3%	22.3%	55.3%	(40.7)%	450.5%	314.2%	100.0%
2025	2.5%	14.3%	16.0%	22.3%	55.1%	(40.5)%	450.4%	303.7%	100.0%
2026	2.7%	14.2%	15.8%	22.3%	55.0%	(40.2)%	450.4%	293.0%	100.0%
2027	2.8%	14.2%	15.6%	22.3%	54.8%	(39.9)%	450.6%	282.3%	100.0%
2028	2.9%	14.1%	15.3%	22.3%	54.6%	(39.6)%	451.0%	271.7%	100.0%
2029	3.0%	14.0%	15.1%	22.3%	54.4%	(39.3)%	451.4%	261.1%	100.0%
2030	3.1%	14.0%	14.7%	22.4%	54.2%	(38.9)%	452.0%	250.6%	100.0%
2035	3.6%	13.7%	13.0%	22.7%	53.0%	(36.5)%	458.2%	199.8%	100.0%
2040	4.0%	13.5%	11.4%	23.4%	52.3%	(34.0)%	472.5%	152.6%	100.0%
2045	4.2%	13.4%	9.0%	24.5%	51.2%	(31.4)%	493.5%	111.0%	100.0%
2050	4.4%	13.3%	7.6%	25.8%	51.1%	(29.4)%	519.1%	74.9%	100.0%
2055	4.4%	13.3%	5.7%	27.3%	50.7%	(28.3)%	547.5%	43.3%	100.0%
2060	4.5%	12.3%	3.5%	28.5%	48.8%	(28.0)%	569.3%	21.4%	100.0%
2065	4.5%	12.3%	2.1%	29.1%	47.9%	(28.1)%	580.3%	9.9%	100.0%
2070	4.5%	12.3%	1.0%	29.4%	47.1%	(28.4)%	584.2%	3.7%	100.0%
2075	4.5%	12.3%	0.4%	29.4%	46.5%	(28.7)%	582.8%	0.9%	100.0%
2080	4.5%	12.3%	0.1%	29.1%	45.9%	(29.0)%	577.7%	0.1%	100.0%
2085	4.5%	12.3%	0.0%	28.7%	45.5%	(29.3)%	569.7%	0.0%	100.0%
2090	4.5%	12.3%	0.0%	28.2%	45.0%	(29.7)%	559.0%	0.0%	100.0%

TABLE 3: Past and Projected Flow of Plan Assets (FERS)

(Dollars in Billions)

Fiscal Year	Employee Contributions	Agency Contributions	Amortized Payment	Total Government Contributions	Investment Income	Total Income	FERS Benefit Payment	Transfer from (to) CSRS	Total Expense	Net Assets End of Year	Dynamic FERS UAL EOY	FERS Payroll
PAST FL	OW											
1987	\$0.3	\$1.5	\$0.0	\$1.5	\$0.2	\$2.0	\$0.0	\$1.8 ¹	\$1.8	\$3.8	\$4.4	\$11.0
1988	0.2	2.4	0.0	2.4	0.4	3.0	(0.2)	1.3^{2}	1.1	8.0	5.6	18.1
1989	0.2	3.0	0.5	3.5	0.8	4.5	(0.2)	0.0	(0.2)	12.3	5.5	23.0
1990	0.2	3.7	0.5	4.1	1.3	5.6	(0.2)	0.0	(0.2)	17.7	5.6	26.7
1991	0.3	4.3	0.5	4.8	1.7	6.8	(0.2)	0.0	(0.2)	24.3	6.1	31.2
1992	0.3	4.9	0.5	5.7	2.3	8.0	(0.3)	0.0	(0.3)	32.0	4.7	35.5
1993	0.3	5.4	0.5	5.9	2.8	9.0	(0.3)	0.0	(0.3)	40.7	1.8	38.9
1994	0.4	5.8	0.2	6.0	3.4	9.8	(0.4)	0.0	(0.4)	50.0	(0.1)	42.2
1995	0.4	5.7	0.2	6.0	4.1	10.5	(0.6)	0.0	(0.6)	59.9	(0.6)	46.4
1996	0.5	6.3	0.0	6.3	3.9	10.7	(0.6)	0.0	(0.6)	69.9	(5.8)	50.2
1997	0.5	6.6	0.0	6.6	7.2	14.3	(0.8)	0.0	(0.8)	83.4	(9.6)	53.0
1998	0.5	6.7	0.0	6.7	6.8	14.0	(0.9)	0.0	(0.9)	96.5	(7.9)	54.4
1999	0.6	7.4	0.0	7.4	7.3	15.3	(1.0)	0.0	(1.0)	110.8	(6.3)	62.6
2000	0.9	8.0	0.0	8.0	8.2	17.1	(1.2)	0.0	(1.2)	126.8	(11.3)	68.1
2001	0.7	8.7	0.0	8.7	9.1	18.5	(1.4)	0.0	(1.4)	143.8	(14.9)	73.9
2002	0.7	9.6	0.0	9.6	9.9	20.2	(1.6)	0.0	(1.6)	162.4	(9.3)	80.4
2003	0.8	10.6	0.0	10.6	10.6	22.0	(1.8)	0.0	(1.8)	182.6	(11.7)	89.5
2004	0.9	11.6	0.0	11.6	11.3	23.8	(2.1)	0.0	(2.1)	204.3	(12.1)	97.6
2005	1.0	13.2	0.0	13.2	12.2	26.4	(2.5)	0.0	(2.5)	228.1	(5.2)	105.7
2006	1.0	14.1	0.2	14.4	12.9	28.3	(2.9)	0.0	(2.9)	253.4	(6.1)	113.4
2007	1.1	15.2	0.2	15.4	14.1	30.6	(3.6)	0.0	(3.6)	280.4	1.0	121.6
2008	1.2	16.7	0.7	17.4	15.6	34.2	(4.1)	0.0	(4.1)	310.5	0.9	131.6
2009	1.3	18.5	0.6	19.1	16.5	36.9	(4.8)	0.0	(4.8)	342.0	9.7	146.0
2010	1.4	20.1	1.2	21.3	16.7	39.4	(5.4)	0.0	(5.4)	376.0	(12.2)	159.1
2011	1.5	22.2	0.0	22.2	17.5	41.3	(6.1)	0.0	(6.1)	411.2	20.1	168.7
2012	1.5	23.1	1.5	24.6	16.8	43.0	(7.2)	0.0	(7.2)	446.9	38.9	172.0
2013	1.6	23.4	2.9	26.4	17.4	45.4	(8.4)	0.0	(8.4)	483.8	33.6	175.0
2014	1.8	23.7	2.3	26.0	17.1	44.9	(9.7)	0.0	(9.7)	519.0	49.9	178.6

 $^{^1}$ Transfer of funds from CSRS to FERS for the individuals who were automatically transferred to FERS on January 1, 1987. 2 Transfer of funds from CSRS to FERS for the individuals electing FERS coverage.

TABLE 3: Past and Projected Flow of Plan Assets (FERS)

(Dollars in Billions)

Fiscal Year	Employee Contribu- tions	Agency Contribu- tions	Treasury Amortized Payment	Postal Amortized Payment	Total Government Contributions	Investment Income	Total Income	FERS Benefit Payment	Transfer from (to) CSRS	Total Expense	Net Assets End of Year	Dynamic FERS UAL EOY	FERS Payroll
PROJEC	CTED FLOW												
2015	\$2.0	\$28.0	\$3.2	\$0.2	\$31.4	\$27.7	\$61.1	\$(11.2)	\$(0.1)	\$(11.3)	\$568.9	\$49.1	\$185.0
2016	2.4	29.0	3.2	0.2	32.4	30.3	65.2	(12.8)	(0.2)	(13.0)	621.1	48.2	192.9
2017	2.8	30.2	3.2	0.2	33.6	33.1	69.5	(14.7)	(0.2)	(14.9)	675.7	47.3	201.8
2018	3.2	31.3	3.2	0.2	34.8	35.9	74.0	(16.7)	(0.3)	(17.1)	732.6	46.4	210.7
2019	3.7	32.5	3.2	0.2	35.9	38.9	78.5	(19.0)	(0.4)	(19.4)	791.7	45.4	219.6
2020	4.2	33.6	3.2	0.2	37.1	42.0	83.2	(21.5)	(0.5)	(22.0)	852.9	44.3	228.5
2021	4.7	34.8	3.2	0.2	38.2	45.2	88.1	(24.1)	(0.6)	(24.8)	916.1	43.2	237.5
2022	5.2	35.9	3.2	0.2	39.4	48.4	93.0	(27.1)	(9.3)	(36.3)	972.8	50.5	246.5
2023	5.7	37.1	3.8	0.2	41.1	51.4	98.2	(30.1)	(26.0)	(56.2)	1014.8	74.3	255.7
2024	6.3	38.2	5.5	0.2	43.9	53.5	103.7	(33.4)	(26.9)	(60.3)	1058.3	98.4	264.9
2025	6.9	39.4	7.2	0.2	46.8	55.8	109.5	(36.6)	(27.7)	(64.3)	1103.5	122.7	274.5
2026	7.5	40.6	9.0	0.2	49.8	58.1	115.4	(40.0)	(28.2)	(68.2)	1150.6	146.9	284.3
2027	8.1	41.8	10.8	0.2	52.8	60.5	121.5	(43.6)	(28.7)	(72.3)	1199.8	170.9	294.3
2028	8.8	43.1	12.6	0.2	55.9	63.1	127.7	(47.3)	(29.1)	(76.5)	1251.0	194.6	304.6
2029	9.4	44.4	14.4	0.2	59.0	65.7	134.2	(51.2)	(29.5)	(80.7)	1304.5	217.9	315.2
2030	10.1	45.7	16.3	0.2	62.2	68.4	140.8	(55.3)	(29.9)	(85.2)	1360.1	240.8	326.0
2035	13.9	52.8	25.7	0.2	78.7	84.1	176.7	(77.1)	(30.2)	(107.3)	1677.5	344.1	385.2
2040	18.0	61.1	34.4	0.2	95.7	103.8	217.6	(102.5)	(26.9)	(129.4)	2078.9	412.1	452.9
2045	22.5	71.0	37.9	0.0	108.9	128.8	260.2	(130.5)	(20.1)	(150.6)	2582.7	431.8	531.0
2050	27.3	82.9	41.9	0.0	124.8	160.1	312.1	(161.2)	(12.7)	(173.9)	3215.1	390.5	622.9
2055	32.4	97.0	39.1	0.0	136.1	199.0	367.5	(195.9)	(7.1)	(203.0)	3991.5	287.0	730.5
2060	38.2	105.2	30.0	0.0	135.2	243.4	416.7	(235.5)	0.0	(235.5)	4863.5	182.7	856.2
2065	44.8	123.3	20.6	0.0	143.9	292.4	481.1	(281.1)	0.0	(281.1)	5825.2	99.7	1004.4
2070	52.6	144.9	11.9	0.0	156.8	346.5	555.8	(334.3)	0.0	(334.3)	6888.5	43.0	1179.3
2075	61.8	170.2	5.2	0.0	175.3	406.4	643.5	(396.9)	0.0	(396.9)	8069.8	12.3	1384.8
2080	72.5	199.7	1.2	0.0	200.9	473.3	746.7	(470.9)	0.0	(470.9)	9389.2	1.3	1625.4
2085	85.1	234.2	(0.0)	0.0	234.2	548.0	867.3	(559.3)	0.0	(559.3)	10863.9	0.0	1906.9
2090	99.8	274.7	(0.0)	0.0	274.7	631.0	1005.5	(664.4)	0.0	(664.4)	12503.4	0.0	2236.9

TABLE 3A: Past and Projected Flow of Assets (FERS)

[Percentage of Total Payroll (CSRS & FERS)]

Fiscal Year	Employee Contribu- tions	Agency Contribu- tions	Treasury Amortized Payment	Postal Amortized Payment	Total Government Contributions	Investment Income	Total Income	FERS Benefit Payment	Transfer from (to) CSRS	Total Expense	Net Assets End of Year	Dynamic FERS UAL EOY	FERS Payroll
PAST FL	OW												
1987	0.4%	2.0%	0.0%	0.0%	2.0%	0.3%	2.7%	0.0%	2.4%**	2.4%	5.2%	5.9%	14.8%
1988	0.2%	3.0%	0.0%	0.0%	3.0%	0.6%	3.8%	(0.2)%	1.6%	1.4%	10.0%	7.0%	22.7%
1989	0.3%	3.7%	0.5%	0.0%	4.2%	0.9%	5.4%	(0.2)%	0.0%	(0.2)%	14.8%	6.6%	27.6%
1990	0.3%	4.2%	0.5%	0.0%	4.7%	1.4%	6.4%	(0.3)%	0.0%	(0.3)%	20.2%	6.4%	30.5%
1991	0.3%	4.6%	0.5%	0.0%	5.2%	1.9%	7.3%	(0.2)%	0.0%	(0.2)%	26.3%	6.6%	33.8%
1992	0.3%	5.0%	0.5%	0.0%	5.8%	2.3%	8.1%	(0.3)%	0.0%	(0.3)%	32.6%	4.8%	36.3%
1993	0.3%	5.4%	0.5%	0.0%	5.9%	2.8%	9.0%	(0.3)%	0.0%	(0.3)%	40.6%	1.8%	38.8%
1994	0.3%	5.7%	0.2%	0.0%	5.9%	3.3%	9.5%	(0.4)%	0.0%	(0.4)%	48.6%	(0.1)%	41.1%
1995	0.4%	5.5%	0.2%	0.0%	5.7%	3.9%	10.0%	(0.5)%	0.0%	(0.5)%	57.1%	(0.6)%	44.2%
1996	0.4%	5.8%	0.0%	0.0%	5.8%	3.7%	9.9%	(0.6)%	0.0%	(0.6)%	64.9%	(5.4)%	46.6%
1997	0.4%	6.1%	0.0%	0.0%	6.1%	6.6%	13.1%	(0.7)%	0.0%	(0.7)%	76.5%	(8.8)%	48.6%
1998	0.5%	6.1%	0.0%	0.0%	6.1%	6.2%	12.8%	(0.8)%	0.0%	(0.8)%	88.1%	(7.2)%	49.6%
1999	0.6%	6.4%	0.0%	0.0%	6.4%	6.3%	13.2%	(0.9)%	0.0%	(0.9)%	95.8%	(5.4)%	54.1%
2000	0.7%	6.6%	0.0%	0.0%	6.6%	6.8%	14.1%	(1.0)%	0.0%	(1.0)%	105.0%	(9.4)%	56.4%
2001	0.6%	6.9%	0.0%	0.0%	6.9%	7.3%	14.8%	(1.1)%	0.0%	(1.1)%	114.8%	(11.9)%	59.0%
2002	0.5%	7.3%	0.0%	0.0%	7.3%	7.6%	15.4%	(1.2)%	0.0%	(1.2)%	123.7%	(7.1)%	61.3%
2003	0.6%	7.6%	0.0%	0.0%	7.6%	7.6%	15.8%	(1.3)%	0.0%	(1.3)%	131.1%	(8.4)%	64.3%
2004	0.6%	8.0%	0.0%	0.0%	8.0%	7.7%	16.3%	(1.4)%	0.0%	(1.3)%	140.3%	(8.3)%	67.1%
2005	0.6%	8.7%	0.0%	0.0%	8.7%	8.1%	17.5%	(1.7)%	0.0%	(1.7)%	151.1%	(3.4)%	70.0%
2006	0.7%	9.1%	0.1%	0.0%	9.2%	8.3%	18.2%	(1.9)%	0.0%	(1.9)%	163.0%	(3.9)%	72.9%
2007	0.7%	9.4%	0.2%	0.0%	9.6%	8.7%	19.0%	(2.2)%	0.0%	(2.2)%	174.0%	0.6%	75.5%
2008	0.7%	9.9%	0.4%	0.0%	10.3%	9.2%	20.3%	(2.4)%	0.0%	(2.4)%	183.9%	0.5%	77.9%
2009	0.7%	10.2%	0.3%	0.0%	10.5%	9.1%	20.4%	(2.6)%	0.0%	(2.6)%	188.8%	5.4%	80.6%
2010	0.7%	10.5%	0.6%	0.0%	11.2%	8.7%	20.6%	(2.8)%	0.0%	(2.8)%	196.9%	(6.4)%	83.2%
2011	0.8%	11.3%	0.0%	0.0%	11.3%	8.9%	20.9%	(3.1)%	0.0%	(3.1)%	208.4%	10.2%	85.5%
2012	0.8%	11.8%	0.8%	0.0%	12.5%	8.6%	21.9%	(3.7)%	0.0%	(3.7)%	227.5%	19.8%	87.6%
2013	0.8%	12.0%	1.5%	0.0%	13.5%	8.9%	23.2%	(4.3)%	0.0%	(4.3)%	247.6%	17.2%	89.6%
2014	0.9%	12.1%	1.2%	0.0%	13.3%	8.7%	22.9%	(4.9)%	0.0%	(4.9)%	264.8%	25.5%	91.1%

^{**} Transfer of funds from CSRS to FERS for the individuals who were automatically transferred to FERS on January 1, 1987.

TABLE 3A: Past and Projected Flow of Assets (FERS)

[Percentage of Total Payroll (CSRS & FERS)]

Fiscal Year	Employee Contribu- tions	Agency Contribu- tions	Treasury Amortized Payment	Postal Amortized Payment	Total Government Contributions	Investment Income	Total Income	FERS Benefit Payment	Transfer from (to) CSRS	Total Expense	Net Assets End of Year	Dynamic FERS UAL EOY	FERS Payroll
PROJEC'	TED FLOW												
2015	1.0%	14.0%	1.6%	0.1%	15.7%	13.9%	30.6%	(5.6)%	0.0%	(5.6)%	285.1%	24.6%	92.7%
2016	1.2%	14.1%	1.6%	0.1%	15.8%	14.8%	31.8%	(6.3)%	(0.1)%	(6.3)%	302.6%	23.5%	94.0%
2017	1.3%	14.2%	1.5%	0.1%	15.8%	15.6%	32.7%	(6.9)%	(0.1)%	(7.0)%	318.3%	22.3%	95.1%
2018	1.5%	14.3%	1.5%	0.1%	15.8%	16.4%	33.7%	(7.6)%	(0.2)%	(7.8)%	333.7%	21.1%	96.0%
2019	1.6%	14.3%	1.4%	0.1%	15.8%	17.1%	34.6%	(8.4)%	(0.2)%	(8.6)%	348.7%	20.0%	96.7%
2020	1.8%	14.3%	1.4%	0.1%	15.8%	17.9%	35.5%	(9.1)%	(0.2)%	(9.4)%	363.3%	18.9%	97.3%
2021	1.9%	14.3%	1.3%	0.1%	15.8%	18.6%	36.3%	(10.0)%	(0.3)%	(10.2)%	377.5%	17.8%	97.9%
2022	2.1%	14.3%	1.3%	0.1%	15.7%	19.3%	37.1%	(10.8)%	(3.7)%	(14.5)%	387.8%	20.1%	98.3%
2023	2.2%	14.3%	1.5%	0.1%	15.8%	19.8%	37.9%	(11.6)%	(10.0)%	(21.7)%	391.5%	28.7%	98.6%
2024	2.4%	14.3%	2.0%	0.1%	16.4%	20.0%	38.7%	(12.5)%	(10.0)%	(22.5)%	395.1%	36.8%	98.9%
2025	2.5%	14.2%	2.6%	0.1%	16.9%	20.1%	39.5%	(13.2)%	(10.0)%	(23.2)%	398.6%	44.3%	99.1%
2026	2.6%	14.2%	3.1%	0.1%	17.4%	20.3%	40.3%	(14.0)%	(9.9)%	(23.8)%	402.0%	51.3%	99.3%
2027	2.7%	14.1%	3.6%	0.1%	17.9%	20.5%	41.1%	(14.7)%	(9.7)%	(24.4)%	405.6%	57.8%	99.5%
2028	2.9%	14.1%	4.1%	0.1%	18.3%	20.6%	41.8%	(15.5)%	(9.5)%	(25.0)%	409.1%	63.6%	99.6%
2029	3.0%	14.0%	4.6%	0.1%	18.7%	20.8%	42.4%	(16.2)%	(9.3)%	(25.5)%	412.7%	68.9%	99.7%
2030	3.1%	14.0%	5.0%	0.1%	19.0%	21.0%	43.1%	(16.9)%	(9.2)%	(26.1)%	416.3%	73.7%	99.8%
2035	3.6%	13.7%	6.7%	0.1%	20.4%	21.8%	45.8%	(20.0)%	(7.8)%	(27.8)%	435.3%	89.3%	100.0%
2040	4.0%	13.5%	7.6%	0.1%	21.1%	22.9%	48.0%	(22.6)%	(5.9)%	(28.6)%	459.0%	91.0%	100.0%
2045	4.2%	13.4%	7.1%	0.0%	20.5%	24.2%	49.0%	(24.6)%	(3.8)%	(28.4)%	486.4%	81.3%	100.0%
2050	4.4%	13.3%	6.7%	0.0%	20.0%	25.7%	50.1%	(25.9)%	(2.0)%	(27.9)%	516.1%	62.7%	100.0%
2055	4.4%	13.3%	5.3%	0.0%	18.6%	27.2%	50.3%	(26.8)%	(1.0)%	(27.8)%	546.4%	39.3%	100.0%
2060	4.5%	12.3%	3.5%	0.0%	15.8%	28.4%	48.7%	(27.5)%	0.0%	(27.5)%	568.0%	21.3%	100.0%
2065	4.5%	12.3%	2.1%	0.0%	14.3%	29.1%	47.9%	(28.0)%	0.0%	(28.0)%	580.0%	9.9%	100.0%
2070	4.5%	12.3%	1.0%	0.0%	13.3%	29.4%	47.1%	(28.4)%	0.0%	(28.4)%	584.1%	3.6%	100.0%
2075	4.5%	12.3%	0.4%	0.0%	12.7%	29.4%	46.5%	(28.7)%	0.0%	(28.7)%	582.7%	0.9%	100.0%
2080	4.5%	12.3%	0.1%	0.0%	12.4%	29.1%	45.9%	(29.0)%	0.0%	(29.0)%	577.7%	0.1%	100.0%
2085	4.5%	12.3%	0.0%	0.0%	12.3%	28.7%	45.5%	(29.3)%	0.0%	(29.3)%	569.7%	0.0%	100.0%
2090	4.5%	12.3%	0.0%	0.0%	12.3%	28.2%	45.0%	(29.7)%	0.0%	(29.7)%	559.0%	0.0%	100.0%

TABLE 4: Past and Projected Flow of Plan Assets (CSRS)

(Dollars in Billions)

Fiscal Year	Employee Contribu- tions	Agency Contribu- tions	Treasury 30 Year Payment	Postal Amort. Payment	Interest Payment on UAL	Military Service Payment	Total Government Contrib.	Transfer from (to) FERS	Invest- ment Income	Total Income	Total Outlays	Fund End of Year	Dynamic CSRS UAL EOY	CSRS Payroll
PAST FLOW														
1987	4.5	4.4	6.0	0.0	9.0	2.0	21.4	$(1.8)^1$	15.6	39.8	(25.7)	174.9	481.6	63.2
1988	4.3	4.3	6.3	0.0	9.0	2.2	21.8	$(1.3)^2$	17.4	42.4	(28.1)	189.1	502.7	61.5
1989	4.3	4.2	6.5	0.0	8.8	2.3	21.9	0.0	18.7	44.8	(29.5)	204.4	542.8	60.4
1990	4.3	4.3	6.8	0.1	9.5	2.5	23.2	0.0	19.6	47.1	(31.2)	220.3	563.1	60.9
1991	4.3	4.3	7.5	0.6	9.7	2.6	24.7	0.0	21.0	50.0	(33.0)	237.3	587.7	61.0
1992	4.4	4.4	8.0	0.8	9.8	2.8	25.8	0.0	21.9	52.0	(32.9)	256.4	595.0	62.5
1993	4.4	4.3	9.0	0.9	9.7	2.9	26.8	0.0	22.7	53.9	(34.8)	276.7	538.3	61.3
1994	4.2	4.3	9.2	1.0	9.3	3.0	26.8	0.0	23.0	54.0	(36.1)	294.3	540.7	60.5
1995	4.1	4.2	9.6	1.2	9.1	3.1	27.2	0.0	24.4	55.6	(38.1)	311.4	546.4	58.5
1996	4.0	4.1	10.1	1.0	9.1	3.2	27.5	0.0	25.6	57.1	(39.2)	329.0	518.2	57.6
1997	3.9	4.1	10.5	1.0	9.8	3.4	28.6	0.0	23.7	56.3	(41.0)	344.1	515.2	56.1
1998	3.8	4.6	10.9	0.9	9.4	3.4	29.2	0.0	25.8	58.8	(42.3)	360.6	504.0	55.2
1999	3.6	4.6	11.3	0.9	9.2	3.5	29.4	0.0	25.3	58.4	(43.0)	376.0	512.9	53.1
2000	3.8	4.4	11.7	1.0	9.0	3.5	29.5	0.0	25.6	58.9	(44.0)	394.7	520.8	52.7
2001	3.6	4.2	11.9	1.1	8.7	3.7	29.6	0.0	26.2	59.4	(45.7)	404.4	525.8	51.3
2002	3.5	4.2	12.3	1.2	8.8	3.7	30.2	0.0	26.2	59.9	(47.1)	417.1	532.9	50.9
2003	3.5	4.0	9.9	0.0	8.8	3.2	25.9	0.0	26.4	55.8	(48.2)	424.5	538.8	49.8
2004	3.3	4.6	10.2	0.2	12.2	3.3	30.5	0.0	24.5	58.3	(49.9)	432.8	546.9	47.9
2005	3.1	4.1	10.2	0.3	12.1	3.2	30.0	0.0	24.0	57.1	(52.0)	437.8	581.3	45.3
2006	2.9	3.9	10.4	0.3	14.2	3.3	32.0	0.0	23.7	58.7	(54.7)	441.5	587.9	42.1
2007	2.7	2.2	10.2	0.0	14.4	6.2	33.0	0.0	23.2	58.9	$(74.5)^3$	426.0	634.5	39.5
2008	2.5	2.1	10.2	0.0	16.1	4.0	32.4	0.0	21.7	56.6	(59.4)	423.2	673.3	37.3
2009	2.3	2.0	10.2	0.0	16.4	4.1	32.9	0.0	20.6	55.8	(62.9)	416.7	663.4	35.1
2010	2.2	1.8	10.0	0.0	17.8	4.1	33.9	0.0	19.7	55.8	(63.9)	408.6	634.5	31.9
2011	2.0	1.7	9.5	0.0	17.7	4.0	33.0	0.0	17.8	52.8	(64.2)	397.2	741.4	28.6
2012	1.7	1.4	9.2	0.0	18.3	4.0	32.9	0.0	17.2	51.8	(66.8)	382.2	750.9	24.5
2013	1.6	1.2	8.9	0.0	17.4	3.9	31.5	0.0	14.0	47.2	(68.6)	360.8	751.4	20.4
2014	1.2	1.0	8.7	0.0	20.1	3.8	33.7	0.0	13.5	48.4	(69.6)	339.6	754.4	17.4

 ¹ Transfer of funds from CSRS to FERS for individuals who automatically transferred to FERS on January 1, 1987.
 ² Transfer of funds from CSRS to FERS for the individuals electing FERS coverage.
 ³ Includes a transfer of \$17.1 billion to the Postal Service Retiree Health Benefit Fund on June 30, 2007

TABLE 4: Past and Projected Flow of Plan Assets (CSRS)

(Dollars in Billions)

Fiscal Year	Employee Contribu- tions	Agency Contribu- tions	Treasury 30 Year Payment	Postal Amortized Payment	Interest Payment on UAL	Military Service Payment	Total Government Contributions	Transfer from (to) FERS	Invest- ment Income	Total Income	Total Outlays	Fund End of Year	Dynamic CSRS UAL EOY	CSRS Payroll
PROJECTED F		V10115	2 49 1110110	2 49 2222	011 01122	1 413 1110110		1210			o uczuje		0.12.201	2 49 2 022
2015	\$0.9	\$0.8	\$8.5	\$0.0	\$20.6	\$3.8	\$33.7	\$0.1	\$16.1	\$50.8	\$(70.4)	\$320.0	\$763.4	\$14.5
2016	0.8	0.7	8.6	0.0	21.1	3.9	34.2	0.2	15.0	50.2	(71.5)	298.6	771.8	12.3
2017	0.7	0.6	8.4	1.5	21.9	3.9	36.4	0.2	13.8	51.1	(72.7)	277.1	778.1	10.5
2018	0.6	0.5	8.3	1.5	22.8	4.0	37.1	0.3	12.7	50.7	(73.7)	254.1	783.5	8.9
2019	0.5	0.4	8.1	1.5	23.6	4.0	37.7	0.4	11.4	50.0	(74.4)	229.6	788.2	7.4
2020	0.4	0.4	7.9	1.5	24.4	4.1	38.2	0.5	10.1	49.3	(75.0)	203.8	792.2	6.2
2021	0.3	0.3	7.5	1.5	25.2	4.1	38.7	0.6	8.8	48.4	(75.5)	176.7	795.7	5.2
2022	0.3	0.2	7.2	1.5	26.0	4.1	39.1	9.3	7.3	55.9	(75.7)	156.9	790.1	4.3
2023	0.2	0.2	6.8	1.5	26.4	4.1	39.0	26.0	6.3	71.6	(75.8)	152.7	767.3	3.6
2024	0.2	0.2	6.4	1.5	25.9	4.1	38.1	26.9	6.1	71.3	(75.8)	148.2	743.2	2.9
2025	0.1	0.1	6.0	1.5	25.4	4.1	37.1	27.7	5.9	70.8	(75.5)	143.4	717.9	2.4
2026	0.1	0.1	5.7	1.5	24.8	4.1	36.2	28.2	5.6	70.2	(75.1)	138.4	691.6	1.9
2027 2028	0.1 0.1	0.1 0.1	5.4 5.1	1.5 1.5	24.1 23.4	4.0 4.0	35.2 34.1	28.7	5.4 5.1	69.4	(74.5)	133.3 127.9	664.3 636.2	1.5 1.2
2028	0.1	0.1	5.1 4.7	1.5	23.4	4.0	33.0	29.1 29.5	5.1 4.9	68.5 67.4	(73.8) (72.9)	127.9	607.3	0.9
2029	0.0	0.0	4.7	1.5	21.9	3.9	31.6	29.3 29.9	4.9	66.2	(72.9)	116.8	577.8	0.9
											(71.0)			
2035	0.0	0.0	2.0	1.5	17.3	3.5	24.3	30.2	3.3	57.8	(63.6)	88.1	425.7	0.1
2040	0.0	0.0	0.7	1.5	12.1	2.8	17.1	26.9	2.2	46.3	(51.3)	61.2	278.9	0.0
2045	0.0	0.0	0.6	0.0	7.4	2.0	10.0	20.1	1.4	31.5	(36.4)	37.7	157.8	0.0
2050	0.0	0.0	0.2	0.0	3.8	1.2	5.2	12.7	0.7	18.6	(21.8)	18.1	76.1	0.0
2055	0.0	0.0	0.1	0.0	1.6	0.6	2.2	7.1	0.4	9.7	(10.5)	7.8	29.0	0.0
2060	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.6	0.9	(3.9)	11.0	0.6	0.0
2065	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.2	0.2	(1.1)	3.2	0.2	0.0
2070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	(0.3)	1.3	0.1	0.0
2075	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.1)	0.8	0.0	0.0
2080	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.1)	0.6	0.0	0.0
2085	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.1)	0.4	0.0	0.0
2090	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.2	0.0	0.0
2030	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)	0.2	0.0	0.0

TABLE 4A: Past and Projected Flow of Plan Assets (CSRS)

[Percentage of Total Payroll (CSRS & FERS)]

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Fiscal Year	Employee Contribu- tions	Agency Contribu- tions	Treasury 30 Year Payment	Postal Amortized Payment	Interest Payment on UAL	Military Service Payment	Total Government Contributions	Transfer from (to) FERS	Investment Income	Total Income	Total Outlays	Fund End of Year	Dynamic CSRS UAL EOY	CSRS Payroll
PAST F	LOW													
1987	6.1%	6.0%	8.0%	0.0%	12.1%	2.8%	28.8%	$(2.4)\%^{1}$	21.1%	53.6%	(34.7)%	235.7%	649.1%	85.2%
1988	5.5%	5.5%	7.9%	0.0%	11.4%	2.7%	27.4%	$(1.6)\%^2$	21.9%	53.2%	(35.3)%	237.6%	631.5%	77.3%
1989	5.1%	5.1%	7.8%	0.0%	10.6%	2.8%	26.2%	0.0%	22.4%	53.7%	(35.4)%	245.1%	650.8%	72.4%
1990	4.9%	4.9%	7.8%	0.1%	10.8%	2.9%	26.5%	0.0%	22.3%	53.7%	(35.6)%	251.4%	642.8%	69.5%
1991	4.6%	4.6%	8.1%	0.7%	10.5%	2.9%	26.8%	0.0%	22.8%	54.2%	(35.8)%	257.2%	636.7%	66.2%
1992	4.5%	4.5%	8.1%	0.8%	10.0%	2.8%	26.2%	0.0%	22.4%	53.1%	(33.6)%	261.6%	607.1%	63.7%
1993	4.4%	4.3%	9.0%	0.9%	9.7%	2.9%	26.8%	0.0%	22.6%	53.8%	(34.7)%	276.3%	537.8%	61.2%
1994	4.1%	4.2%	8.9%	1.0%	9.7%	2.9%	26.1%	0.0%	22.4%	52.6%	(35.1)%	286.3%	526.0%	58.9%
1995	3.9%	4.0%	9.2%	1.1%	8.7%	2.9%	25.9%	0.0%	23.2%	53.0%	(36.3)%	296.9%	520.9%	55.8%
1996	3.7%	3.8%	9.4%	0.9%	8.4%	3.0%	25.5%	0.0%	23.7%	52.9%	(36.4)%	305.3%	480.7%	53.4%
1997	3.6%	3.7%	9.6%	1.0%	9.0%	3.1%	26.2%	0.0%	21.7%	51.7%	(37.6)%	315.5%	472.4%	51.4%
1998	3.5%	4.2%	9.9%	0.8%	8.6%	3.1%	26.7%	0.0%	23.5%	53.6%	(38.6)%	329.1%	459.9%	50.4%
1999	3.1%	4.0%	9.7%	0.8%	7.9%	3.0%	25.4%	0.0%	21.9%	50.5%	(37.2)%	325.1%	443.4%	45.9%
2000	3.2%	3.6%	9.7%	0.8%	7.4%	2.9%	24.4%	0.0%	21.2%	48.8%	(36.4)%	326.8%	431.3%	43.6%
2001	2.9%	3.3%	9.5%	0.9%	6.9%	3.0%	23.6%	0.0%	20.9%	47.4%	(36.5)%	323.0%	420.0%	41.0%
2002	2.7%	3.2%	9.3%	1.0%	6.7%	2.8%	23.0%	0.0%	19.9%	45.6%	(35.9)%	317.7%	405.9%	38.7%
2003	2.5%	2.9%	7.1%	0.0%	6.3%	2.3%	18.6%	0.0%	19.0%	40.1%	(34.6)%	304.8%	386.9%	35.7%
2004	2.3%	3.2%	7.0%	0.2%	8.4%	2.2%	21.0%	0.0%	16.8%	40.1%	(34.3)%	297.3%	375.6%	32.9%
2005	2.1%	2.7%	6.8%	0.2%	8.1%	2.1%	19.9%	0.0%	15.9%	37.8%	(34.4)%	290.0%	385.0%	30.0%
2006	1.9%	2.5%	6.7%	0.2%	9.1%	2.1%	20.6%	0.0%	15.2%	37.7%	(35.2)%	284.0%	378.2%	27.1%
2007	1.7%	1.4%	6.4%	0.0%	8.9%	3.8%	20.5%	0.0%	14.3%	36.5%	$(46.2)\%^3$	264.3%	393.0%	24.5%
2008	1.5%	1.2%	6.0%	0.0%	9.5%	2.4%	19.1%	0.0%	12.9%	33.5%	(35.2)%	250.6%	398.7%	22.1%
2009	1.3%	1.1%	5.6%	0.0%	9.1%	2.3%	18.2%	0.0%	11.4%	30.8%	(34.7)%	230.1%	366.3%	19.4%
2010	1.2%	0.9%	5.2%	0.0%	9.3%	2.1%	17.7%	0.0%	10.3%	29.2%	(33.5)%	213.9%	332.2%	16.7%
2011	1.0%	0.9%	4.8%	0.0%	9.0%	2.0%	16.7%	0.0%	9.0%	26.8%	(32.5)%	201.3%	375.8%	14.5%
2012	0.9%	0.7%	4.7%	0.0%	9.3%	2.0%	16.8%	0.0%	8.8%	26.4%	(34.0)%	194.6%	382.3%	12.5%
2013	0.8%	0.6%	4.6%	0.0%	8.9%	2.0%	16.1%	0.0%	7.2%	24.2%	(35.1)%	184.6%	384.5%	10.4%
2014	0.6%	0.5%	4.4%	0.0%	10.3%	1.9%	17.2%	0.0%	6.9%	24.7%	(35.5)%	173.3%	384.9%	8.9%

¹ Transfer of funds from CSRS to FERS for individuals who automatically transferred to FERS on January 1, 1987.

² Transfer of funds from CSRS to FERS for the individuals electing FERS coverage.
³ Includes a transfer of \$17.1 billion to the Postal Service Retiree Health Benefit Fund on June 30, 2007

TABLE 4A: Past and Projected Flow of Plan Assets (CSRS)

[Percentage]	of Total Payroll	(CSRS & FERS)]
LI CI CCIIICA SC	or rount rayron	(CDIED OF LLED)]

	[Terechage of Total Layron (CSRS & FERS)]													
Fiscal Year	Employee Contribu- tions	Agency Contribu- tions	Treasury 30 Year Payment	Postal Amortized Payment	Interest Payment on UAL	Military Service Payment	Total Government Contributions	Transfer from (to) FERS	Investment Income	Total Income	Total Outlays	Fund End of Year	Dynamic CSRS UAL EOY	CSRS Payroll
PROJEC	CTED FLOW													
2015	0.5%	0.4%	4.2%	0.0%	10.3%	1.9%	16.9%	0.0%	8.0%	25.5%	(35.3)%	160.4%	382.6%	7.3%
2016	0.4%	0.3%	4.2%	0.0%	10.3%	1.9%	16.7%	0.1%	7.3%	24.4%	(34.9)%	145.5%	376.1%	6.0%
2017	0.3%	0.3%	4.0%	0.7%	10.3%	1.9%	17.1%	0.1%	6.5%	24.1%	(34.2)%	130.5%	366.5%	4.9%
2018	0.3%	0.2%	3.8%	0.7%	10.4%	1.8%	16.9%	0.2%	5.8%	23.1%	(33.6)%	115.7%	356.8%	4.0%
2019	0.2%	0.2%	3.6%	0.7%	10.4%	1.8%	16.6%	0.2%	5.0%	22.0%	(32.8)%	101.1%	347.2%	3.3%
2020	0.2%	0.2%	3.3%	0.6%	10.4%	1.7%	16.3%	0.2%	4.3%	21.0%	(32.0)%	86.8%	337.5%	2.7%
2021	0.1%	0.1%	3.1%	0.6%	10.4%	1.7%	15.9%	0.3%	3.6%	19.9%	(31.1)%	72.8%	327.9%	2.1%
2022	0.1%	0.1%	2.9%	0.6%	10.4%	1.6%	15.6%	3.7%	2.9%	22.3%	(30.2)%	62.6%	315.0%	1.7%
2023	0.1%	0.1%	2.6%	0.6%	10.2%	1.6%	15.1%	10.0%	2.4%	27.6%	(29.3)%	58.9%	296.0%	1.4%
2024	0.1%	0.1%	2.4%	0.6%	9.7%	1.5%	14.2%	10.0%	2.3%	26.6%	(28.3)%	55.3%	277.5%	1.1%
2025	0.1%	0.0%	2.2%	0.5%	9.2%	1.5%	13.4%	10.0%	2.1%	25.6%	(27.3)%	51.8%	259.3%	0.9%
2026	0.0%	0.0%	2.0%	0.5%	8.7%	1.4%	12.7%	9.9%	2.0%	24.5%	(26.2)%	48.4%	241.7%	0.7%
2027	0.0%	0.0%	1.8%	0.5%	8.2%	1.4%	11.9%	9.7%	1.8%	23.5%	(25.2)%	45.1%	224.6%	0.5%
2028	0.0%	0.0%	1.7%	0.5%	7.7%	1.3%	11.2%	9.5%	1.7%	22.4%	(24.1)%	41.8%	208.0%	0.4%
2029	0.0%	0.0%	1.5%	0.5%	7.2%	1.3%	10.4%	9.3%	1.5%	21.3%	(23.1)%	38.7%	192.1%	0.3%
2030	0.0%	0.0%	1.3%	0.5%	6.7%	1.2%	9.7%	9.2%	1.4%	20.2%	(22.0)%	35.8%	176.8%	0.2%
2035	0.0%	0.0%	0.5%	0.4%	4.5%	0.9%	6.3%	7.8%	0.9%	15.0%	(16.5)%	22.9%	110.5%	0.0%
2040	0.0%	0.0%	0.2%	0.3%	2.7%	0.6%	3.8%	5.9%	0.5%	10.2%	(11.3)%	13.5%	61.6%	0.0%
2045	0.0%	0.0%	0.1%	0.0%	1.4%	0.4%	1.9%	3.8%	0.3%	5.9%	(6.9)%	7.1%	29.7%	0.0%
2050	0.0%	0.0%	0.0%	0.0%	0.6%	0.2%	0.8%	2.0%	0.1%	3.0%	(3.5)%	2.9%	12.2%	0.0%
2055	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.3%	1.0%	0.1%	1.3%	(1.4)%	1.1%	4.0%	0.0%
2060	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	(0.5)%	1.3%	0.1%	0.0%
2065	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.1)%	0.3%	0.0%	0.0%
2070	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.0)%	0.1%	0.0%	0.0%
2075	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	(0.0)%	0.1%	0.0%	0.0%
2080	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%
2085	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%
2090	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%

Tables 2, 2A, 3, 3A, 4 and 4A Technical Notes

Tables 2, 2A, 3 and 3A reflect an open group projection that assumes a sufficient number of new employees are hired each year so that the total employee population remains constant, based on the active employee population as of September 30, 2014.

The dynamic Unfunded Actuarial Liability (UAL) amounts shown for past years in Tables 2, 3 and 4 were determined for each year according to the actuarial assumptions in place for that year, as outlined in Table 5.

The Payroll amounts in Tables 2, 3 and 4 are reduced to reflect assumed leave without pay.

The Projected Flow of plan assets calculated in Tables 2, 3 and 4 for future years is based on the following economic assumptions:*

Rate of Inflation for Determination of COLA	General Schedule Salary Increase*	Rate of Interest on CSRDF Investments
Dec 2014 1.70%	Jan 2015 1.00%	Jun 2015 5.25%
Future Years: 3.00%	Future Years: 3.25%	Future Years: 5.25%

The projections in Table 2 and 3 reflect contributions for FERS "Revised Annuity Employees" (FERS-RAE) generally hired during calendar year 2013 and contributions for FERS "Further Revised Annuity Employees" (FERS-FRAE) generally hired after December 31, 2013. Excess agency contributions for FERS-FRAE, expected to be allocated to CSRS, are included in the projected Agency Contributions shown for FERS in Tables 2 and 3 and in the projected transfer payments from FERS to CSRS shown in Tables 3 and 4.

^{*} The General Schedule salary increase assumption incorporates the general pay raise component plus the locality pay differential component. A separate additional assumption applies for individual merit & longevity pay increases; see Demographic Assumptions in Table 7.

Table 5 Valuation Assumption History

		Long Term	Economic A	Assumptions		Normal Cos	t Percentage	
D 1D	Ecc. d. C. M.I. d. D.	T (1 .:	T	Salary	Capa	EEDG	FERS-	FERS-
Recommend Date	Effective for Valuation Dates	Inflation	Interest	Growth	CSRS	FERS	RAE	FRAE
10/1/1979	9/30/1979 - 9/30/1982	5.00%	6.00%	5.50%	36.8%	N/A	N/A	N/A
10/1/1983*	9/30/1983 - 9/30/1986	5.00%	6.50%	5.50%	34.8%	16.1%	N/A	N/A
10/1/1987	9/30/1987 - 9/30/1988	5.00%	7.00%	5.00%	28.9%	13.8%	N/A	N/A
4/1/1989	9/30/1989 - 9/30/1992	5.00%	7.00%	5.00%	28.3%	13.7%	N/A	N/A
12/31/1992	9/30/1993 - 9/30/1995	4.50%	7.00%	4.50%	25.1%	12.2%	N/A	N/A
2/11/1997*	9/30/1996 - 9/30/1999	4.00%	7.00%	4.25%	24.2%	11.5%	N/A	N/A
3/16/2001	9/30/2000 - 9/30/2001	3.75%	6.75%	4.25%	24.4%	11.5%	N/A	N/A
5/8/2003	9/30/2002 - 9/30/2004	3.25%	6.25%	4.00%	25.0%	12.0%	N/A	N/A
6/8/2006*	9/30/2005 - 9/30/2006	3.50%	6.25%	4.25%	25.2%	12.0%	N/A	N/A
7/25/2008*	9/30/2007 - 9/30/2008	3.50%	6.25%	4.25%	25.8%	12.3%	N/A	N/A
6/11/2010	9/30/2009 - 9/30/2010	3.00%	5.75%	3.75%	26.0%	12.7%	N/A	N/A
7/13/2012*	9/30/2011 - 9/30/2011	3.00%	5.25%	3.25%	29.1%	14.0%	14.2%	N/A
6/18/2013*	9/30/2012 -	3.00%	5.25%	3.25%	29.3%	14.5%	15.0%	15.1%

^{*} Change in Demographic Assumptions

Table 6 Employee Population Data

Active Employee Population as of September 30, 2014*

Employees	Non-Postal	Postal	Total	Avg Age	Avg Service
CSRS	140,000	48,000	188,000	59.9	34.9
FERS	2,027,000	438,000	2,465,000	47.2	13.0
Total	2,167,000	486,000	2,653,000	48.1	14.6

CSRS Active Employees

Number as of September 30, 2014*

	Closest Whole Years of Service									
Age Nearest Birthday	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total		
<45	0	0	0	0	0	0	0	0		
45 - 49	4	2	9	12	16	25	391	459		
50 - 54	47	84	161	301	465	768	25,416	27,241		
55 - 59	108	192	410	753	1,084	1,773	64,562	68,882		
60 - 64	135	221	414	724	959	1,475	53,217	57,145		
65 - 69	62	92	190	302	451	497	23,419	25,014		
70 - 74	16	33	43	67	85	115	6,293	6,651		
75+	3	9	5	14	17	31	2,529	2,609		
CSRS Total	377	633	1,231	2,174	3,077	4,683	175,827	188,000		

^{*}Employee counts are determined on a full-time equivalent basis

Average Salary as of September 30, 2014

	Closest Whole Years of Service									
Age Nearest Birthday	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total		
<45										
45 - 49	\$64,602	\$68,634	\$76,586	\$65,895	\$75,433	\$85,313	\$96,395	\$93,443		
50 - 54	73,893	75,346	71,801	75,384	78,512	83,467	89,532	88,842		
55 - 59	75,263	79,724	75,947	75,405	78,548	80,680	86,660	86,155		
60 - 64	82,555	78,144	77,933	81,704	79,804	81,485	84,193	83,945		
65 - 69	94,383	88,596	91,502	87,148	86,876	87,612	87,335	87,384		
70 - 74	122,783	107,229	101,423	97,464	103,917	96,422	90,926	91,478		
75+	87,460	166,526	93,607	114,765	110,932	112,003	92,692	93,403		
CSRS	\$82,919	\$82,467	\$79,441	\$80,015	\$81,022	\$82,741	\$86,680	\$86,343		

Table 6 Employee Population Data

FERS Active Employees

Number* as of September 30, 2014*

Closest Whole Years of Service									
Age Nearest Birthday	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total	
15 - 19	271	0	0	0	0	0	0	271	
20 - 24	19,774	1,060	0	0	0	0	0	20,835	
25 - 29	78,964	41,969	1,280	0	0	0	0	122,213	
30 - 34	93,068	110,915	33,477	1,156	0	0	0	238,616	
35 - 39	69,298	96,850	75,156	22,165	911	0	0	264,381	
40 - 44	59,904	79,252	73,711	59,779	24,251	3,434	0	300,332	
45 - 49	59,497	79,264	64,623	62,355	61,310	49,091	3,712	379,853	
50 - 54	52,442	83,090	68,603	55,193	57,780	108,797	35,705	461,610	
55 - 59	35,415	60,719	59,022	47,866	43,235	80,529	42,804	369,590	
60 - 64	18,265	34,438	35,563	31,750	28,039	42,218	24,335	214,608	
65 - 69	5,504	12,234	12,919	10,667	10,333	13,666	8,368	73,692	
70 - 74	1,189	2,224	2,593	2,193	2,102	2,805	1,664	14,770	
75+	282	628	689	587	643	839	562	4,231	
FERS Total	493,874	602,644	427,638	293,711	228,605	301,380	117,149	2,465,000	

^{*}Employee counts are determined on a full-time equivalent basis

Average Salary as of September 30, 2014

	Closest Whole Years of Service									
Age Nearest Birthday	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total		
15 - 19	\$29,928	-	-	-	-	-	-	\$29,928		
20 - 24	41,314	\$44,079	-	-	-	-	-	41,455		
25 - 29	52,251	62,826	\$58,611	-	-	-	-	55,949		
30 - 34	60,526	69,868	72,366	\$71,329	-	-	-	66,582		
35 - 39	67,152	73,412	77,781	75,859	\$76,892	-	-	73,230		
40 - 44	66,905	74,780	78,813	78,866	81,106	\$85,672	-	75,648		
45 - 49	67,120	73,092	77,878	79,343	87,176	86,617	\$88,148	78,165		
50 - 54	69,137	73,881	75,974	77,677	83,653	86,476	86,822	79,299		
55 - 59	71,018	74,922	76,278	74,829	80,627	80,555	84,246	77,727		
60 - 64	74,967	76,799	77,746	75,699	80,380	79,991	84,350	78,589		
65 - 69	83,398	79,703	80,450	79,244	82,815	82,040	87,726	81,824		
70 - 74	93,785	88,040	84,344	84,097	88,346	85,825	93,261	87,479		
75+	96,153	98,454	88,850	88,144	90,112	87,562	95,475	91,480		
FERS	\$63,471	\$72,727	\$77,130	\$77,558	\$83,350	\$83,795	\$85,607	\$75,163		

MALE

Normal Retirement Rates-CSRS

Age				Service			
(ANB)	5 - 9	0 - 14	15-19	20	21-29	30	31+
55	0.0000	0.0000	0.0000	0.0000	0.0000	0.1810	0.3472
56 - 59	0.0000	0.0000	0.0000	0.0000	0.0000	0.1580	0.1614
60	0.0000	0.0000	0.0000	0.3017	0.2224	0.2374	0.1947
61	0.0000	0.0000	0.0000	0.2385	0.1116	0.1401	0.1803
62	0.2897	0.3702	0.3629	0.3412	0.1441	0.1699	0.2038
63	0.1538	0.1641	0.1688	0.1974	0.1279	0.1570	0.1907
64	0.1756	0.1937	0.1692	0.1802	0.1366	0.1421	0.1984
65	0.3046	0.3649	0.3108	0.3079	0.1982	0.2225	0.2335
66 - 69	0.2104	0.2300	0.2020	0.2254	0.1594	0.1802	0.1937
70-74	0.1775	0.2006	0.2090	0.2055	0.1667	0.1886	0.1745

Normal Retirement Rates-FERS

Age				Service			
(ANB)	5 - 9	10-14	15-19	20	21-29	30	31+
MRA	0.0000	0.0000	0.0000	0.0000	0.0000	0.1308	0.2297
58° - 59	0.0000	0.0000	0.0000	0.0000	0.0000	0.0867	0.0916
60	0.0000	0.0000	0.0000	0.2180	0.1472	0.1304	0.1105
61	0.0000	0.0000	0.0000	0.1310	0.0633	0.0770	0.1023
62	0.2572	0.1964	0.2037	0.3184	0.2036	0.2402	0.2881
63	0.0830	0.1063	0.1041	0.2054	0.1210	0.1570	0.1907
64	0.0875	0.1045	0.1091	0.1695	0.1150	0.1421	0.1984
65	0.1289	0.1752	0.1894	0.2862	0.1734	0.2225	0.2335
66 - 69	0.1133	0.1354	0.1391	0.2195	0.1475	0.1802	0.1937
70-74	0.1244	0.1310	0.1381	0.2063	0.1354	0.1886	0.1745

Involuntary Retirement

Involuntary Retirement								
Age	CSRS	FERS						
42	0.0213	0.0073						
43	0.0213	0.0073						
44	0.0213	0.0073						
45	0.0178	0.0092						
46	0.0160	0.0100						
47	0.0159	0.0105						
48	0.0170	0.0097						
49	0.0191	0.0104						
50	0.0220	0.0109						
51	0.0253	0.0107						
52	0.0290	0.0103						
53	0.0326	0.0118						
54	0.036	0.0151						
55	0.0389	0.0179						
56	0.0410	0.0185						
57	0.0422	0.0170						
58	0.0421	0.0169						
59+	0.0405	0.0170						

MRA+10 Retirement

MINATIO Remement						
Age	FERS					
55	0.0150					
56	0.0142					
57	0.0135					
58	0.0156					
59	0.0191					
60	0.0404					
61	0.0580					

Merit/Longevity Salary Increases

			Age Neare	st Birthday		
SERVICE	17-24	25-29	30-34	35-44	45-54	55+
0	0.0850	0.0765	0.0563	0.0465	0.0437	0.0348
1	0.0915	0.0943	0.0768	0.0643	0.0563	0.0449
2	0.0832	0.0849	0.0671	0.0542	0.0476	0.0391
3	0.0654	0.0690	0.0553	0.0438	0.0387	0.0331
4	0.0657	0.0627	0.0541	0.0446	0.0390	0.0327
5	0.0645	0.0499	0.0421	0.0334	0.0299	0.0277
6	0.0688	0.0465	0.0380	0.0296	0.0263	0.0247
7	0.0761	0.0445	0.0359	0.0284	0.0244	0.0224
8	0.0000	0.0448	0.0334	0.0252	0.0216	0.0197
9	0.0000	0.0471	0.0341	0.0266	0.0219	0.0188
10	0.0000	0.0482	0.0325	0.0237	0.0186	0.0161
11	0.0000	0.0515	0.0321	0.0222	0.0168	0.0146
12	0.0000	0.0552	0.0325	0.0217	0.0163	0.0145
13	0.0000	0.0000	0.0323	0.0197	0.0147	0.0127
14	0.0000	0.0000	0.0335	0.0189	0.0132	0.0116
15	0.0000	0.0000	0.0349	0.0186	0.0126	0.0107
16	0.0000	0.0000	0.0376	0.0193	0.0131	0.0111
17	0.0000	0.0000	0.0393	0.0189	0.0127	0.0106
18	0.0000	0.0000	0.0000	0.0184	0.0119	0.0097
19	0.0000	0.0000	0.0000	0.0186	0.0125	0.0099
20+	0.0000	0.0000	0.0000	0.0177	0.0112	0.0075

Assumed Distribution of New Entrants

Age		Amount Prior Service (Years)							
(ANB)	0-1	2-5	6-10	11-15	16-20				
17-19	787	1	0	0	0				
20-24	7052	396	63	0	0				
25-29	7521	914	744	34	0				
30-34	6278	772	831	293	10				
35-39	6102	684	618	340	63				
40-44	8274	753	464	283	78				
45-49	7012	728	325	201	74				
50-54	4723	743	235	118	51				
55-59	2585	697	160	66	30				
60-64	898	249	63	20	9				
65-69	229	58	16	4	3				
70-74	68	19	4	1	0				
75+	5	2	0	0	0				

Assumed New Entrants : Average Salary (as of FY 2010)

Age		Amount	Prior Servic	e (Years)	
(ANB)	0-1	2-5	6-10	11-15	16-20
17-19	\$31,389	\$34,028	-	-	-
20-24	\$40,349	\$37,919	\$42,515	-	-
25-29	\$46,608	\$42,582	\$45,626	\$49,515	-
30-34	\$56,360	\$46,376	\$52,145	\$51,413	\$51,988
35-39	\$58,167	\$48,647	\$54,269	\$56,780	\$52,814
40-44	\$57,543	\$50,832	\$53,644	\$56,191	\$54,873
45-49	\$60,001	\$48,878	\$54,454	\$55,603	\$54,093
50-54	\$63,232	\$47,685	\$54,072	\$57,975	\$56,076
55-59	\$65,238	\$47,883	\$55,113	\$60,669	\$58,841
60-64	\$71,214	\$51,893	\$56,940	\$62,376	\$66,430
65-69	\$76,308	\$52,255	\$60,636	\$66,488	\$63,581
70-74	\$76,926	\$46,763	\$48,732	\$51,517	-
75+	\$70,088	\$38,793	-	-	-

 $^{^{\}ast}$ FERS retirement rate for ages "58-59" applies for [Minimum Retirement Age+1] through age 59

MALE

Withdrawal Rates (Offset for Re-entry)

	Age Nearest Birthday									
SERVICE	17-24	25-29	30-34	35-39	40-44	45+				
0	0.0019	0.0022	0.0024	0.0023	0.0023	0.0033				
1	0.0665	0.0473	0.0483	0.0407	0.0281	0.0281				
2	0.0908	0.0664	0.0602	0.0581	0.0382	0.0386				
3	0.0915	0.0642	0.0585	0.0586	0.0394	0.0351				
4	0.0605	0.0517	0.0473	0.0441	0.0319	0.0284				
5	0.0576	0.0474	0.0416	0.0403	0.0321	0.0262				
6	0.0654	0.0456	0.0386	0.0364	0.0323	0.0240				
7	0.0407	0.0451	0.0369	0.0348	0.0313	0.0215				
8	0.0000	0.0432	0.0337	0.0304	0.0273	0.0197				
9	0.0000	0.0452	0.0322	0.0291	0.0262	0.0173				
10	0.0000	0.0429	0.0300	0.0255	0.0221	0.0179				
11	0.0000	0.0429	0.0264	0.0228	0.0220	0.0166				
12	0.0000	0.0453	0.0288	0.0209	0.0195	0.0158				
13	0.0000	0.0000	0.0275	0.0187	0.0172	0.0157				
14	0.0000	0.0000	0.0308	0.0197	0.0164	0.0135				
15	0.0000	0.0000	0.0297	0.0175	0.0144	0.0130				
16	0.0000	0.0000	0.0285	0.0159	0.0128	0.0123				
17	0.0000	0.0000	0.0309	0.0191	0.0121	0.0113				
18	0.0000	0.0000	0.0000	0.0185	0.0110	0.0101				
19	0.0000	0.0000	0.0000	0.0177	0.0109	0.0087				
20+	0.0000	0.0000	0.0000	0.0167	0.0099	0.0049				

% Withdrawing Employees Electing Refunds

SERVICE	CSRS	FERS	FERS-RAE	FERS-FRAE
0	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000
2	1.0000	1.0000	1.0000	1.0000
3	1.0000	1.0000	1.0000	1.0000
4	1.0000	1.0000	1.0000	1.0000
5	0.9300	0.9100	0.9200	0.9200
6	0.9200	0.8700	0.8900	0.9000
7	0.9200	0.8200	0.8600	0.8800
8	0.9100	0.7800	0.8300	0.8600
9	0.9100	0.7300	0.8000	0.8300
10	0.9100	0.6900	0.7700	0.8200
11	0.9100	0.6400	0.7400	0.8000
12	0.9000	0.6000	0.7100	0.7700
13	0.8900	0.5500	0.6800	0.7500
14	0.8900	0.5100	0.6500	0.7300
15	0.8800	0.4600	0.6200	0.7000
16	0.8800	0.4200	0.5900	0.6900
17	0.8700	0.3700	0.5600	0.6600
18	0.8600	0.3300	0.5300	0.6400
19	0.8600	0.2800	0.5000	0.6200
20+	0.7800	0.2400	0.4400	0.5500

Death Rate				Fiscal Year				Annual Improvement
Age	2014	2015	2016	2017	2018	2019	2020	2021+
17	0.00064	0.00063	0.00062	0.00061	0.00060	0.00059	0.00059	0.010
18	0.00059	0.00058	0.00057	0.00056	0.00055	0.00054	0.00054	0.010
19	0.00055	0.00053	0.00053	0.00052	0.00051	0.00050	0.00050	0.010
20	0.00051	0.00050	0.00049	0.00048	0.00047	0.00047	0.00046	0.010
21	0.00047	0.00046	0.00045	0.00044	0.00044	0.00043	0.00043	0.010
22	0.00043	0.00042	0.00041	0.00041	0.00040	0.00040	0.00039	0.010
23	0.00039	0.00039	0.00038	0.00037	0.00037	0.00036	0.00036	0.010
24	0.00036	0.00036	0.00035	0.00034	0.00034	0.00034	0.00033	0.010
25	0.00034	0.00033	0.00033	0.00032	0.00032	0.00031	0.00031	0.010
26	0.00032	0.00032	0.00031	0.00030	0.00030	0.00030	0.00029	0.010
27	0.00031	0.00030	0.00030	0.00029	0.00029	0.00029	0.00028	0.010
28	0.00031	0.00030	0.00029	0.00029	0.00028	0.00028	0.00028	0.010
29	0.00031	0.00030	0.00030	0.00029	0.00029	0.00029	0.00028	0.010
30	0.00032	0.00032	0.00031	0.00031	0.00030	0.00030	0.00030	0.010
31	0.00035	0.00034	0.00033	0.00033	0.00032	0.00032	0.00032	0.010
32	0.00037	0.00036	0.00035	0.00035	0.00034	0.00034	0.00034	0.010
33	0.00037	0.00037	0.00036	0.00035	0.00035	0.00034	0.00034	0.010
34	0.00037	0.00037	0.00036	0.00035	0.00035	0.00034	0.00034	0.010
35	0.00039	0.00038	0.00037	0.00037	0.00036	0.00036	0.00035	0.010
36	0.00042	0.00042	0.00041	0.00040	0.00040	0.00039	0.00039	0.010
37	0.00048	0.00047	0.00046	0.00046	0.00045	0.00044	0.00044	0.010
38	0.00054	0.00053	0.00052	0.00051	0.00051	0.00050	0.00050	0.010
39	0.00060	0.00059	0.00058	0.00057	0.00056	0.00055	0.00055	0.010
40	0.00064	0.00063	0.00062	0.00061	0.00060	0.00059	0.00059	0.010
41	0.00070	0.00068	0.00067	0.00066	0.00065	0.00064	0.00064	0.010
42	0.00076	0.00075	0.00073	0.00072	0.00071	0.00071	0.00070	0.010
43	0.00084	0.00082	0.00081	0.00080	0.00079	0.00078	0.00077	0.010
44	0.00091	0.00089	0.00087	0.00086	0.00085	0.00084	0.00083	0.010
45	0.00096	0.00095	0.00093	0.00092	0.00090	0.00089	0.00089	0.010
46	0.00104	0.00102	0.00101	0.00099	0.00098	0.00097	0.00096	0.010
47	0.00115	0.00113	0.00111	0.00110	0.00108	0.00107	0.00106	0.010
48	0.00128	0.00126	0.00124	0.00122	0.00120	0.00119	0.00117	0.010
49	0.00141	0.00139	0.00137	0.00135	0.00133	0.00131	0.00130	0.010
50	0.00153	0.00151	0.00148	0.00146	0.00144	0.00143	0.00141	0.010
51	0.00167	0.00164	0.00162	0.00159	0.00157	0.00156	0.00154	0.010
52	0.00184	0.00181	0.00178	0.00176	0.00174	0.00172	0.00170	0.010
53	0.00201	0.00198	0.00195	0.00193	0.00190	0.00188	0.00186	0.010
54	0.00213	0.00209	0.00206	0.00204	0.00201	0.00199	0.00197	0.010
55	0.00219	0.00216	0.00213	0.00210	0.00207	0.00205	0.00203	0.010
56	0.00226	0.00222	0.00219	0.00216	0.00213	0.00210	0.00208	0.010
57	0.00235	0.00231	0.00227	0.00224	0.00221	0.00218	0.00216	0.010
58	0.00249	0.00244	0.00240	0.00237	0.00234	0.00231	0.00229	0.010
59	0.00265	0.00260	0.00255	0.00252	0.00248	0.00245	0.00243	0.010
60	0.00279	0.00274	0.00269	0.00265	0.00262	0.00258	0.00256	0.010
61	0.00293	0.00287	0.00282	0.00278	0.00274	0.00271	0.00268	0.010
62	0.00307	0.00301	0.00295	0.00291	0.00287	0.00283	0.00280	0.010
63	0.00326	0.00320	0.00314	0.00309	0.00305	0.00302	0.00299	0.010
64	0.00353	0.00346	0.00340	0.00335	0.00330	0.00327	0.00323	0.010
65	0.00384	0.00377	0.00371	0.00365	0.00360	0.00356	0.00352	0.010
66	0.00422	0.00414	0.00407	0.00401	0.00396	0.00391	0.00387	0.010
67	0.00467	0.00458	0.00451	0.00444	0.00438	0.00433	0.00429	0.010
68	0.00521	0.00511	0.00503	0.00496	0.00489	0.00484	0.00479	0.010
69	0.00583	0.00573	0.00564	0.00555	0.00548	0.00542	0.00537	0.010
70	0.00653	0.00642	0.00632	0.00622	0.00614	0.00607	0.00601	0.010
71	0.00725	0.00713	0.00702	0.00693	0.00684	0.00676	0.00669	0.010
72	0.00796	0.00783	0.00771	0.00760	0.00751	0.00742	0.00735	0.010
73	0.00862	0.00848	0.00836	0.00824	0.00814	0.00805	0.00797	0.010
74 75	0.00923	0.00909	0.00896	0.00884	0.00873	0.00863	0.00855	0.010
75	0.00980	0.00965	0.00952	0.00939	0.00928	0.00918	0.00909	0.010

Death Rate w/ Survivor				Fiscal Year				Annual Improvemen
Age	2014	2015	2016	2017	2018	2019	2020	2021+
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
29	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.010
30	0.00015	0.00015	0.00014	0.00014	0.00014	0.00014	0.00014	0.010
31	0.00022	0.00022	0.00022	0.00021	0.00021	0.00021	0.00020	0.010
32	0.00025	0.00025	0.00024	0.00024	0.00021	0.00021	0.00023	0.010
33	0.00023	0.00023	0.00024	0.00024	0.00023	0.00023	0.00023	0.010
34	0.00024	0.00023	0.00022	0.00022	0.00022	0.00021	0.00021	0.010
35	0.00024	0.00023	0.00023	0.00023	0.00022	0.00022	0.00022	0.010
36	0.00028	0.00028	0.00027	0.00027	0.00027	0.00020	0.00020	0.010
37	0.00033	0.00034	0.00034	0.00035	0.00035	0.00032	0.00032	0.010
38	0.00037	0.00037	0.00036	0.00035	0.00035	0.00034	0.00034	0.010
39	0.00037	0.00030	0.00036	0.00035	0.00035	0.00034	0.00034	0.010
40	0.00038	0.00037	0.00030	0.00030	0.00033	0.00033	0.00034	0.010
41	0.00041		0.00039		0.00038	0.00038	0.00037	ì
		0.00046		0.00044				0.010
42 43	0.00052 0.00055	0.00051	0.00050	0.00050	0.00049 0.00052	0.00048 0.00051	0.00048 0.00051	0.010 0.010
43		0.00054	0.00054	0.00053				
45	0.00057 0.00059	0.00056	0.00055	0.00054	0.00054	0.00053	0.00052 0.00054	0.010
		0.00058	0.00057	0.00056	0.00055	0.00055		0.010
46	0.00064	0.00062	0.00061	0.00060	0.00060	0.00059	0.00058	0.010
47	0.00072	0.00070	0.00069	0.00068	0.00067	0.00066	0.00066	0.010
48	0.00082	0.00081	0.00079	0.00078	0.00077	0.00076	0.00075	0.010
49	0.00092	0.00090	0.00089	0.00087	0.00086	0.00085	0.00084	0.010
50	0.00101	0.00099	0.00097	0.00096	0.00095	0.00094	0.00093	0.010
51	0.00110	0.00109	0.00107	0.00105	0.00104	0.00103	0.00102	0.010
52	0.00123	0.00121	0.00119	0.00118	0.00116	0.00115	0.00114	0.010
53	0.00134	0.00132	0.00130	0.00129	0.00127	0.00126	0.00124	0.010
54	0.00141	0.00139	0.00137	0.00135	0.00133	0.00132	0.00131	0.010
55	0.00143	0.00140	0.00138	0.00137	0.00135	0.00133	0.00132	0.010
56	0.00147	0.00145	0.00142	0.00141	0.00139	0.00137	0.00136	0.010
57	0.00158	0.00155	0.00152	0.00150	0.00148	0.00147	0.00145	0.010
58	0.00171	0.00168	0.00165	0.00163	0.00161	0.00159	0.00157	0.010
59	0.00183	0.00179	0.00176	0.00174	0.00171	0.00169	0.00167	0.010
60	0.00191	0.00187	0.00184	0.00181	0.00179	0.00176	0.00175	0.010
61	0.00196	0.00192	0.00189	0.00186	0.00183	0.00181	0.00179	0.010
62	0.00204	0.00201	0.00197	0.00194	0.00191	0.00189	0.00187	0.010
63	0.00224	0.00220	0.00216	0.00213	0.00210	0.00207	0.00205	0.010
64	0.00248	0.00243	0.00239	0.00235	0.00232	0.00229	0.00227	0.010
65	0.00265	0.00260	0.00256	0.00252	0.00248	0.00245	0.00243	0.010
66	0.00286	0.00281	0.00276	0.00272	0.00268	0.00265	0.00263	0.010
67	0.00322	0.00316	0.00311	0.00306	0.00302	0.00299	0.00296	0.010
68	0.00366	0.00359	0.00353	0.00348	0.00344	0.00340	0.00336	0.010
69	0.00404	0.00397	0.00391	0.00385	0.00380	0.00375	0.00372	0.010
70	0.00455	0.00447	0.00440	0.00434	0.00429	0.00424	0.00419	0.010
71	0.00513	0.00504	0.00496	0.00489	0.00483	0.00478	0.00473	0.010
72	0.00554	0.00545	0.00537	0.00529	0.00523	0.00517	0.00512	0.010
73	0.00562	0.00553	0.00545	0.00538	0.00531	0.00525	0.00520	0.010
74	0.00567	0.00558	0.00550	0.00543	0.00536	0.00530	0.00525	0.010
75	0.00571	0.00563	0.00555	0.00548	0.00541	0.00535	0.00530	0.010

Table 7
Demographic Assumptions

	Death Rate for Spouse Survivor of Male														
	Non-Disabi	lity Annuitai	nt Death Rate	e					Durat	tion 3+			Duration 1	Duration 2	Annual Improvement
Age	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2020	2020	2021+
17	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
18	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
19	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
20	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
21	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
22	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
23	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
24	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
25	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
26	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
27	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
28	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
29	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
30	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
31	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
32	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
33	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
34	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
35	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.01906	0.01893	0.01878	0.01862	0.01845	0.01827	0.0087	0.0052	0.0100
36	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00619	0.00614	0.00610	0.00604	0.00599	0.00593	0.0029	0.0015	0.0100
37	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00033	0.00033	0.00033	0.00032	0.00032	0.00032	0.0010	0.0000	0.0100
38	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.0019	0.0000	0.0100
39	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00190	0.00189	0.00187	0.00186	0.00184	0.00182	0.0033	0.0000	0.0100
40	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00347	0.00345	0.00342	0.00339	0.00336	0.00333	0.0031	0.0014	0.0100
41	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00252	0.00250	0.00248	0.00246	0.00244	0.00241	0.0026	0.0031	0.0100
42	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00188	0.00187	0.00186	0.00184	0.00182	0.00180	0.0024	0.0042	0.0100
43	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00278	0.00276	0.00274	0.00272	0.00269	0.00267	0.0016	0.0046	0.0100
44	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00280	0.00278	0.00276	0.00274	0.00271	0.00269	0.0014	0.0040	0.0100
45	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00241	0.00239	0.00237	0.00235	0.00233	0.00231	0.0021	0.0020	0.0100
46	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00295	0.00292	0.00290	0.00288	0.00285	0.00282	0.0030	0.0011	0.0100
47	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00375	0.00372	0.00369	0.00366	0.00363	0.00359	0.0033	0.0022	0.0100
48	0.00287	0.00285	0.00283	0.00281	0.00278	0.00275	0.00307	0.00305	0.00302	0.00300	0.00297	0.00294	0.0032	0.0042	0.0100
49	0.00287	0.00285	0.00283	0.00280	0.00278	0.00275	0.00408	0.00405	0.00402	0.00398	0.00395	0.00391	0.0034	0.0046	0.0100
50	0.00282	0.00280	0.00278	0.00275	0.00273	0.00270	0.00505	0.00501	0.00497	0.00493	0.00489	0.00484	0.0028	0.0028	0.0100
51	0.00415	0.00411	0.00408	0.00404	0.00400	0.00396	0.00461	0.00458	0.00454	0.00450	0.00446	0.00441	0.0012	0.0013	0.0100
52	0.00402	0.00398	0.00394	0.00390	0.00386	0.00383	0.00366	0.00363	0.00360	0.00357	0.00354	0.00350	0.0019	0.0013	0.0100
53	0.00357	0.00353	0.00349	0.00346	0.00342	0.00339	0.00346	0.00343	0.00340	0.00337	0.00334	0.00330	0.0044	0.0028	0.0100
54	0.00444	0.00439	0.00434	0.00429	0.00425	0.00421	0.00460	0.00455	0.00451	0.00446	0.00442	0.00437	0.0049	0.0056	0.0100
55	0.00425	0.00420	0.00415	0.00411	0.00406	0.00402	0.00452	0.00447	0.00442	0.00438	0.00433	0.00429	0.0032	0.0067	0.0100
56	0.00482	0.00476	0.00470	0.00464	0.00459	0.00455	0.00490	0.00484	0.00479	0.00474	0.00469	0.00464	0.0026	0.0058	0.0100
57	0.00506	0.00499	0.00492	0.00486	0.00481	0.00476	0.00533	0.00527	0.00521	0.00515	0.00510	0.00505	0.0033	0.0037	0.0100
58	0.00500	0.00492	0.00486	0.00480	0.00474	0.00470	0.00601	0.00594	0.00587	0.00580	0.00574	0.00569	0.0040	0.0041	0.0100
59	0.00525	0.00517	0.00509	0.00503	0.00497	0.00492	0.00644	0.00636	0.00629	0.00622	0.00615	0.00609	0.0048	0.0058	0.0100
60	0.00569	0.00560	0.00552	0.00545	0.00538	0.00533	0.00717	0.00708	0.00700	0.00692	0.00685	0.00678	0.0055	0.0069	0.0100
61	0.00625	0.00615	0.00606	0.00598	0.00591	0.00585	0.00804	0.00794	0.00785	0.00777	0.00768	0.00761	0.0063	0.0062	0.0100
62	0.00665	0.00654	0.00644	0.00635	0.00628	0.00622	0.00829	0.00819	0.00810	0.00801	0.00793	0.00785	0.0054	0.0069	0.0100
63	0.00684	0.00672	0.00661	0.00652	0.00645	0.00638	0.00900	0.00889	0.00879	0.00870	0.00861	0.00852	0.0067	0.0094	0.0100
64	0.00761	0.00747	0.00735	0.00725	0.00717	0.00709	0.01048	0.01036	0.01025	0.01014	0.01003	0.00993	0.0086	0.0098	0.0100
65	0.00873	0.00857	0.00844	0.00832	0.00822	0.00814	0.01114	0.01102	0.01090	0.01078	0.01067	0.01056	0.0092	0.0099	0.0100

Table 7
Demographic Assumptions

	Death Rate for Spouse Survivor of Male														
	Non-Disabi	ility Annuitar	nt Death Rat	e					Dura	tion 3+			Duration 1	Duration 2	Annual Improvement
Age	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2020	2020	2021+
66	0.00960	0.00942	0.00927	0.00914	0.00903	0.00894	0.01251	0.01237	0.01224	0.01211	0.01199	0.01187	0.0110	0.0118	0.0100
67	0.01067	0.01048	0.01031	0.01017	0.01005	0.00994	0.01284	0.01270	0.01257	0.01244	0.01231	0.01219	0.0115	0.0109	0.0100
68	0.01177	0.01156	0.01138	0.01122	0.01108	0.01097	0.01421	0.01406	0.01392	0.01377	0.01364	0.01350	0.0118	0.0131	0.0100
69	0.01334	0.01311	0.01290	0.01272	0.01257	0.01245	0.01600	0.01584	0.01568	0.01553	0.01537	0.01522	0.0138	0.0139	0.0100
70	0.01490	0.01464	0.01442	0.01422	0.01405	0.01391	0.01761	0.01744	0.01727	0.01711	0.01694	0.01677	0.0142	0.0147	0.0100
71	0.01634	0.01607	0.01583	0.01561	0.01543	0.01528	0.01979	0.01961	0.01943	0.01924	0.01906	0.01887	0.0156	0.0170	0.0100
72	0.01867	0.01836	0.01809	0.01786	0.01765	0.01747	0.02151	0.02132	0.02113	0.02094	0.02074	0.02053	0.0191	0.0198	0.0100
73	0.02133	0.02099	0.02069	0.02043	0.02019	0.01999	0.02371	0.02352	0.02331	0.02310	0.02288	0.02265	0.0197	0.0223	0.0100
74	0.02373	0.02338	0.02305	0.02276	0.02251	0.02228	0.02586	0.02565	0.02544	0.02521	0.02497	0.02472	0.0227	0.0221	0.0100
75	0.02744	0.02704	0.02668	0.02635	0.02606	0.02580	0.02842	0.02820	0.02797	0.02773	0.02747	0.02719	0.0222	0.0249	0.0100
76	0.03130	0.03086	0.03046	0.03010	0.02977	0.02947	0.03109	0.03085	0.03060	0.03033	0.03005	0.02975	0.0247	0.0293	0.0100
77	0.03425	0.03380	0.03337	0.03298	0.03263	0.03230	0.03399	0.03373	0.03346	0.03317	0.03285	0.03253	0.0288	0.0312	0.0100
78	0.03995	0.03944	0.03896	0.03852	0.03810	0.03772	0.03685	0.03657	0.03626	0.03594	0.03560	0.03525	0.0331	0.0338	0.0100
79	0.04435	0.04380	0.04329	0.04281	0.04235	0.04193	0.03951	0.03919	0.03886	0.03851	0.03815	0.03777	0.0365	0.0342	0.0100
80	0.04984	0.04925	0.04868	0.04815	0.04765	0.04717	0.04384	0.04349	0.04311	0.04272	0.04231	0.04189	0.0384	0.0402	0.0100
81	0.05641	0.05577	0.05515	0.05456	0.05399	0.05345	0.04764	0.04725	0.04684	0.04641	0.04597	0.04551	0.0460	0.0432	0.0100
82	0.06357	0.06287	0.06219	0.06153	0.06090	0.06029	0.05352	0.05308	0.05263	0.05215	0.05165	0.05114	0.0462	0.0487	0.0100
83	0.07096	0.07020	0.06946	0.06874	0.06804	0.06736	0.06019	0.05972	0.05921	0.05868	0.05813	0.05755	0.0532	0.0544	0.0100
84	0.07893	0.07810	0.07730	0.07651	0.07573	0.07498	0.06733	0.06682	0.06627	0.06569	0.06507	0.06442	0.0595	0.0585	0.0100
85	0.08939	0.08849	0.08759	0.08671	0.08584	0.08498	0.07364	0.07309	0.07250	0.07187	0.07119	0.07048	0.0672	0.0713	0.0100
86	0.09856	0.09759	0.09663	0.09567	0.09472	0.09377	0.08371	0.08310	0.08243	0.08172	0.08096	0.08015	0.0737	0.0717	0.0100
87	0.11034	0.10928	0.10823	0.10717	0.10611	0.10505	0.09294	0.09226	0.09153	0.09074	0.08990	0.08900	0.0769	0.0852	0.0100
88	0.12132	0.12019	0.11906	0.11791	0.11675	0.11558	0.10213	0.10139	0.10059	0.09972	0.09880	0.09781	0.0923	0.0923	0.0100
89	0.13825	0.13701	0.13574	0.13445	0.13314	0.13181	0.11583	0.11501	0.11411	0.11314	0.11209	0.11097	0.0974	0.1006	0.0100
90	0.15280	0.15146	0.15009	0.14868	0.14724	0.14577	0.12941	0.12852	0.12754	0.12646	0.12530	0.12404	0.1132	0.1107	0.0100
91	0.17026	0.16886	0.16742	0.16594	0.16442	0.16286	0.14270	0.14181	0.14081	0.13970	0.13849	0.13717	0.1275	0.1247	0.0095
92	0.18742	0.18599	0.18450	0.18297	0.18138	0.17975	0.16051	0.15962	0.15860	0.15745	0.15617	0.15477	0.1434	0.1418	0.0090
93	0.20836	0.20689	0.20535	0.20375	0.20209	0.20037	0.18010	0.17918	0.17811	0.17690	0.17555	0.17406	0.1517	0.1652	0.0085
94	0.22657	0.22508	0.22352	0.22190	0.22020	0.21844	0.19486	0.19393	0.19284	0.19161	0.19023	0.18871	0.1571	0.1832	0.0080
95	0.24923	0.24773	0.24614	0.24448	0.24273	0.24091	0.21571	0.21474	0.21361	0.21233	0.21089	0.20931	0.1752	0.2062	0.0075
96	0.26926	0.26778	0.26620	0.26453	0.26278	0.26094	0.23392	0.23294	0.23180	0.23050	0.22905	0.22745	0.2115	0.2224	0.0070
97	0.29201	0.29054	0.28897	0.28731	0.28554	0.28369	0.26077	0.25976	0.25858	0.25723	0.25573	0.25406	0.2504	0.2269	0.0065
98	0.30296	0.30158	0.30010	0.29852	0.29684	0.29506	0.27682	0.27582	0.27466	0.27334	0.27187	0.27024	0.2787	0.2306	0.0060
99	0.32582	0.32450	0.32306	0.32152	0.31986	0.31810	0.29279	0.29182	0.29070	0.28942	0.28799	0.28640	0.2893	0.2287	0.0055
100	0.35551	0.35422	0.35282	0.35131	0.34967	0.34792	0.31165	0.31071	0.30962	0.30839	0.30700	0.30546	0.2781	0.2372	0.0050
101	0.38415	0.38294	0.38160	0.38014	0.37856	0.37686	0.31188	0.31104	0.31006	0.30894	0.30769	0.30631	0.2789	0.2378	0.0045
102	0.38832	0.38726	0.38608	0.38479	0.38337	0.38184	0.31211	0.31137	0.31049	0.30950	0.30839	0.30715	0.2796	0.2385	0.0040
103	0.40173	0.40080	0.39976	0.39861	0.39733	0.39594	0.31235	0.31169	0.31093	0.31006	0.30908	0.30800	0.2804	0.2391	0.0035
104	0.43940	0.43857	0.43763	0.43656	0.43537	0.43407	0.31258	0.31202	0.31137	0.31062	0.30978	0.30885	0.2812	0.2398	0.0030
105	0.47279	0.47208	0.47125	0.47031	0.46925	0.46808	0.31282	0.31235	0.31180	0.31118	0.31048	0.30970	0.2819	0.2405	0.0025
106	0.48218	0.48160	0.48093	0.48016	0.47930	0.47834	0.31305	0.31268	0.31224	0.31174	0.31118	0.31056	0.2827	0.2411	0.0020
107	0.46929	0.46887	0.46837	0.46781	0.46718	0.46648	0.31329	0.31301	0.31268	0.31230	0.31188	0.31141	0.2835	0.2418	0.0015
108	0.40787	0.40763	0.40734	0.40702	0.40665	0.40625	0.31352	0.31334	0.31312	0.31287	0.31258	0.31227	0.2843	0.2424	0.0010
109	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.0000	1.0000	0.0000

Table 7
Demographic Assumptions

	Disability Retirement		Death Rate Disabled		Non-	Death Term of Disa	bility	Surv	rivor Spouse Remar	riage	Fraction of Ann. v Benefit	w/ a Reduced
Age	Rate	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Age Ret	Dis Ret
17	0.00000	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
18	0.00000	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
19	0.00000	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
20	0.00000	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
21	0.00000	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
22	0.00000	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
23	0.00126	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
24	0.00106	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
25	0.00088	0.00671	0.00000	0.00000	0.00211	0.02436	0.02731	0.03801	0.06494	0.07199	0.00000	0.00000
26	0.00074	0.01702	0.00000	0.00136	0.00016	0.02796	0.04208	0.03801	0.06494	0.07199	0.25222	0.48860
27	0.00062	0.02195	0.00000	0.00413	0.00000	0.02756	0.04523	0.03801	0.06494	0.07199	0.25222	0.48860
28	0.00054	0.02238	0.00109	0.00537	0.00000	0.02286	0.03782	0.03801	0.06494	0.07199	0.25222	0.48860
29	0.00048	0.01876	0.00318	0.00485	0.00000	0.01659	0.02659	0.03801	0.06494	0.07199	0.25222	0.48860
30	0.00045	0.01435	0.00533	0.00306	0.00013	0.01192	0.01650	0.03801	0.06494	0.07199	0.25222	0.48860
31	0.00045	0.01091	0.00677	0.00179	0.00643	0.00972	0.01153	0.03801	0.06494	0.07199	0.25222	0.48860
32	0.00048	0.00942	0.00675	0.00175	0.01504	0.01021	0.01333	0.03801	0.06494	0.07199	0.25222	0.48860
33	0.00053	0.00801	0.00508	0.00222	0.02080	0.01134	0.01857	0.03801	0.06494	0.07199	0.25222	0.48860
34	0.00062	0.00705	0.00335	0.00271	0.01708	0.01112	0.02197	0.03801	0.06494	0.07199	0.25222	0.48860
35	0.00073	0.00705	0.00293	0.00457	0.00952	0.01014	0.02388	0.03801	0.06494	0.07199	0.25222	0.48860
36	0.00087	0.00850	0.00408	0.00733	0.00456	0.01024	0.02398	0.02067	0.02822	0.03087	0.28435	0.48860
37	0.00104	0.01069	0.00664	0.00917	0.00468	0.01212	0.02174	0.01307	0.01300	0.01415	0.31541	0.48860
38	0.00123	0.01169	0.00957	0.00766	0.00766	0.01266	0.02035	0.01262	0.01270	0.01374	0.34538	0.48860
39	0.00144	0.01191	0.00913	0.00715	0.00692	0.01150	0.01791	0.01528	0.01743	0.01593	0.37426	0.48860
40	0.00168	0.01110	0.00815	0.00870	0.00341	0.00978	0.01677	0.01712	0.01885	0.01570	0.40206	0.48860
41	0.00193	0.01280	0.00831	0.00971	0.00211	0.01085	0.01398	0.01449	0.01605	0.01406	0.42878	0.48860
42	0.00221	0.01428	0.01342	0.01137	0.00278	0.00895	0.01282	0.00844	0.01264	0.01253	0.45441	0.48860
43	0.00250	0.01262	0.02042	0.00971	0.00543	0.00730	0.01266	0.00492	0.01041	0.01144	0.47896	0.48860
44	0.00280	0.01474	0.01972	0.01080	0.00590	0.00986	0.01069	0.00482	0.00949	0.01314	0.50243	0.48860
45	0.00310	0.01934	0.01602	0.01076	0.00843	0.00894	0.00902	0.00643	0.01058	0.01034	0.52481	0.48860
46	0.00341	0.02344	0.01571	0.01051	0.01023	0.00627	0.00931	0.00757	0.01018	0.00725	0.54611	0.48860
47	0.00371	0.02628	0.01890	0.01261	0.00842	0.00458	0.01089	0.00692	0.01051	0.00655	0.56633	0.48860
48	0.00400	0.03214	0.02167	0.01401	0.00628	0.00780	0.00856	0.00543	0.00872	0.00792	0.58547	0.48860
49	0.00428	0.03762	0.02209	0.01522	0.00401	0.00805	0.00725	0.00483	0.00583	0.00620	0.60354	0.48860
50	0.00454	0.03635	0.01983	0.01670	0.00324	0.00700	0.00662	0.00286	0.00387	0.00527	0.62052	0.48860
51	0.00477	0.04129	0.02313	0.01702	0.00304	0.00880	0.00580	0.00196	0.00367	0.00462	0.63644	0.50310
52	0.00497	0.04185	0.03028	0.01689	0.00384	0.00658	0.00514	0.00263	0.00374	0.00335	0.65128	0.51691
53	0.00513	0.04226	0.03348	0.01880	0.00422	0.00526	0.00534	0.00178	0.00287	0.00184	0.66506	0.53004
54	0.00526	0.03974	0.03517	0.02070	0.00391	0.00412	0.00409	0.00243	0.00017	0.00113	0.67778	0.54248
55	0.00534	0.03941	0.03206	0.02244	0.00394	0.00346	0.00334	0.00000	0.00000	0.00000	0.68944	0.55423
56	0.00539	0.04030	0.02980	0.02110	0.00453	0.00466	0.00327	0.00000	0.00000	0.00000	0.70005	0.56530
57	0.00540	0.04630	0.02980	0.02351	0.00513	0.00546	0.00313	0.00000	0.00000	0.00000	0.70961	0.57568
58	0.00537	0.05422	0.03027	0.02335	0.00265	0.00376	0.00226	0.00000	0.00000	0.00000	0.71812	0.58538
59	0.00532	0.05749	0.03590	0.02588	0.00199	0.00212	0.00277	0.00000	0.00000	0.00000	0.72561	0.59438
60	0.00525	0.06446	0.04778	0.02668	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.73207	0.60270
61	0.00518	0.07100	0.05060	0.02812	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.73751	0.61033
62	0.00512	0.06012	0.04525	0.02949	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74194	0.61728
63	0.00510	0.04532	0.03538	0.03079	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74536	0.62353
64	0.00511	0.03248	0.02488	0.03283	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74780	0.62908
65	0.00520	0.02389	0.01736	0.03329	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74925	0.63395
66	0.00537	0.01979	0.01380	0.03589	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74972	0.63811

Table 7
Demographic Assumptions

	Disability Retirement		Death Rate Disabled	l	Non-	-Death Term of Disa	bility	Surv	vivor Spouse Reman	rriage	Fraction of Ann. w/ a Reduced Benefit	
Age	Rate	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Age Ret	Dis Ret
67	0.00566	0.01972	0.01348	0.03896	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74923	0.64157
68	0.00608	0.02311	0.01516	0.03814	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74778	0.64432
69	0.00665	0.02930	0.01794	0.04306	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74539	0.64636
70	0.00740	0.03755	0.02115	0.04334	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.74206	0.64768
71	0.00835	0.03755	0.02115	0.04902	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.73780	0.64828
72	0.00953	0.03755	0.02115	0.05057	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.73263	0.64815
73	0.01095	0.03755	0.02115	0.05298	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.72654	0.64729
74	0.01263	0.03755	0.02115	0.05644	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.71955	0.64569
75	0.00000	0.03755	0.02115	0.06083	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.71166	0.64334
76		0.03755	0.02115	0.06445	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.70288	0.64025
77		0.03755	0.02115	0.07144	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.69323	0.63640
78		0.03755	0.02115	0.07385	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.68269	0.63179
79		0.03755	0.02115	0.07981	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.67128	0.62642
80		0.03755	0.02115	0.08789	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.65901	0.62028
81		0.03755	0.02115	0.09073	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.64586	0.61338
82		0.03755	0.02115	0.10143	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.63186	0.60570
83		0.03755	0.02115	0.10760	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.61700	0.59726
84		0.03755	0.02115	0.11592	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.60127	0.58804
85		0.03755	0.02115	0.12676	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.58469	0.57805
86		0.03755	0.02115	0.14102	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.56726	0.56728
87		0.03755	0.02115	0.15036	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.54897	0.55574
88		0.03755	0.02115	0.16819	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.52982	0.54343
89		0.03755	0.02115	0.17481	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.50982	0.53034
90		0.03755	0.02115	0.19484	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.48897	0.51647
91		0.03755	0.02115	0.22175	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.46726	0.50183
92		0.03755	0.02115	0.24119	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.44469	0.48641
93		0.03755	0.02115	0.25402	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
94		0.03755	0.02115	0.26279	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
95		0.03755	0.02115	0.27807	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
96		0.03755	0.02115	0.28936	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
97		0.03755	0.02115	0.30795	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
98		0.03755	0.02115	0.34861	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
99		0.03755	0.02115	0.38228	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
100		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
101		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
102		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
103		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
104		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
105		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
106		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
107		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
108		0.03755	0.02115	0.39319	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022
109		1.00000	1.00000	1.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.42127	0.47022

FEMALE

Normal Retirement Rates-CSRS

1 tormer recen	ement Rates	СБТСБ					
Age				Service			
(ANB)	5 - 9	10 - 14	15-19	20	21-29	30	31+
55	0	0	0	0	0	0.2849	0.343
56 - 59	0	0	0	0	0	0.2615	0.1619
60	0	0	0	0.3525	0.2904	0.3105	0.1868
61	0	0	0	0.2861	0.1305	0.1982	0.1738
62	0.2185	0.2684	0.3184	0.3477	0.1595	0.2157	0.1886
63	0.1169	0.1196	0.1346	0.2031	0.1413	0.2185	0.1801
64	0.1336	0.1368	0.1526	0.1941	0.1454	0.2134	0.1847
65	0.2311	0.2552	0.2249	0.2744	0.1885	0.2432	0.2095
66 - 69	0.1579	0.1721	0.1708	0.2202	0.1581	0.2085	0.1783
70-74	0.1403	0.151	0.1716	0.1892	0.1675	0.2307	0.1763

Normal Retirement Rates-FERS

Involuntary Retirement

CSRS

0.0167

0.0167

0.0167

0.0150

0.0147

0.0157

0.0178

0.0208

0.0244

0.0285

0.0329

0.0372

0.0415

0.0453

0.0486

0.0511

0.0526

0.0530

FERS

0.0073

0.0073

0.0073

0.0083

0.0093

0.0104

0.0104

0.0118

0.0122

0.0126

0.0127

0.0148

0.0189

0.0221

0.0241

0.0234 0.0244

0.0244

Age

42

43

44

45

46

47

48

49

50 51

52

53 54

55

56

57 58

Age				Service			
(ANB)	5 - 9	10-14	15-19	20	21-29	30	31+
MRA	0.0000	0.0000	0.0000	0.0000	0.0000	0.1897	0.1841
58* - 59	0.0000	0.0000	0.0000	0.0000	0.0000	0.1340	0.0835
60	0.0000	0.0000	0.0000	0.2347	0.1559	0.1591	0.0964
61	0.0000	0.0000	0.0000	0.1466	0.0673	0.1015	0.0897
62	0.3635	0.2212	0.2030	0.3411	0.1917	0.2593	0.2267
63	0.1133	0.1125	0.1108	0.2031	0.1256	0.2185	0.1801
64	0.1070	0.1161	0.1073	0.1881	0.1228	0.2134	0.1847
65	0.1907	0.2273	0.2000	0.3175	0.1795	0.2432	0.2095
66 - 69	0.1522	0.1536	0.1479	0.2688	0.1582	0.2085	0.1783
70-74	0.1675	0.1684	0.1562	0.2127	0.1381	0.2307	0.1763

Merit/Longevity Salary Increases

17-24

0.085

0.0915

0.0832

0.0654

0.0657

0.0645

0.0688 0.0761

> 0 0

> 0

0

0

0

0

0

0

0

0

SERVICE

2 3 4

10 11

12 13

14

15

16 17

18

19

Age Nearest Birthday

35-44

0.0465

0.0643

0.0542

0.0438

0.0446

0.0334

0.0296

0.0284

0.0252

0.0266

0.0237

0.0222

0.0217

0.0197

0.0189

0.0186

0.0193

0.0189

0.0184

0.0186

0.0177

45-54

0.0437

0.0563

0.0476

0.0387

0.039

0.0299

0.0263

0.0244

0.0216

0.0219

0.0186

0.0168

0.0163

0.0147

0.0132

0.0126

0.0131

0.0127

0.0119

0.0125

0.0112

55+ 0.0348

0.0449

0.0391

0.0331

0.0327

0.0277

0.0247

0.0224

0.0197

0.0188

0.0161

0.0146

0.0145

0.0127

0.0116

0.0107

0.0111

0.0106

0.0097

0.0099

0.0075

30-34

0.0563

0.0768

0.0671

0.0553

0.0541

0.0421

0.038

0.0359

0.0334

0.0341

0.0325

0.0321

0.0325

0.0323

0.0335

0.0349

0.0376

0.0393

0

0

0.0765

0.0943

0.0849

0.069

0.0627

0.0499

0.0465

0.0445

0.0448

0.0471

0.0482

0.0515

0.0552

0

0

Assumed	l Distribution	of New Entr	ants		
Age		Amoun	t Prior Servio	e (Years)	
(ANB)	0-1	2-5	6-10	11-15	16-20
17-19	670	1	0	0	0
20-24	7293	188	26	0	0
25-29	8626	422	351	15	0
30-34	7575	346	387	115	3
35-39	7120	270	286	130	17
40-44	6870	220	184	106	27
45-49	5697	164	104	69	20
50-54	3871	88	51	31	11
55-59	2002	37	16	10	4
60-64	578	9	3	2	0
65-69	120	3	1	0	0
70-74	31	0	0	0	0
75+	3	0	0	0	0

Age FERS 56 0.0174 57 0.0155 58 0.0157 59 0.0182

MRA+10 Retirement

Assumed	i new Emilani	S. Average 3	aiaiy (as oi i	1 2010)								
Age		Amount Prior Service (Years)										
(ANB)	0-1	2-5	6-10	11-15	16-20							
17-19	\$29,435	\$32,138	-	-	-							
20-24	\$38,102	\$34,445	\$36,562	-	-							
25-29	\$45,206	\$39,233	\$40,477	\$45,501	-							
30-34	\$49,826	\$42,236	\$44,965	\$45,661	\$48,024							
35-39	\$49,165	\$43,994	\$47,090	\$48,495	\$51,179							
40-44	\$49,649	\$45,860	\$46,938	\$49,742	\$48,899							
45-49	\$50,948	\$46,882	\$50,247	\$49,951	\$52,471							
50-54	\$53,139	\$50,235	\$54,404	\$54,614	\$50,334							
55-59	\$53,544	\$50,753	\$54,474	\$60,621	\$52,959							
60-64	\$53,408	\$48,393	\$65,096	\$54,673	-							
65-69	\$50,148	\$36,228	\$36,663	-	-							
70-74	\$41,762	-	-	-	-							
75+	\$38,355	-	-	-	-							

FERS retirement rate for ages "58-59" applies for [Minimum Retirement Age+1] through age 59.

FEMALE

Withdrawal Rates (Offset for Re-entry)

			Age Neare	st Birthday		
SERVICE	17-24	25-29	30-34	35-39	40-44	45+
0	0.003	0.0039	0.0039	0.0043	0.0044	0.0044
1	0.0717	0.0587	0.0538	0.0436	0.0365	0.0351
2	0.1107	0.0883	0.0805	0.0673	0.0528	0.0492
3	0.1109	0.0849	0.0791	0.0677	0.0523	0.0475
4	0.0828	0.0663	0.0626	0.0534	0.0424	0.0353
5	0.0689	0.0611	0.0552	0.0464	0.0359	0.0303
6	0.063	0.0548	0.052	0.0443	0.0314	0.0265
7	0.0526	0.0512	0.0492	0.0403	0.0294	0.0253
8	0	0.0493	0.047	0.0385	0.029	0.0238
9	0	0.0453	0.0436	0.0367	0.0268	0.0207
10	0	0.0375	0.0396	0.0311	0.0229	0.0192
11	0	0.0349	0.036	0.0291	0.0249	0.0196
12	0	0.0199	0.0312	0.0275	0.0222	0.0171
13	0	0	0.0283	0.024	0.0196	0.0159
14	0	0	0.0284	0.0243	0.0198	0.0152
15	0	0	0.0271	0.0215	0.017	0.0142
16	0	0	0.0232	0.0194	0.0159	0.0128
17	0	0	0.0125	0.0197	0.0145	0.0121
18	0	0	0	0.0198	0.0136	0.0107
19	0	0	0	0.0149	0.0128	0.0093
20+	0	0	0	0.0132	0.0098	0.0059

% Withdrawing Employees Electing Refunds

SERVICE	CSRS	FERS	FERS-RAE	FERS-FRAE
0	1.0000	1.0000	1.0000	1.0000
1	1.0000	1.0000	1.0000	1.0000
2	1.0000	1.0000	1.0000	1.0000
3	1.0000	1.0000	1.0000	1.0000
4	1.0000	1.0000	1.0000	1.0000
5	0.9300	0.9100	0.9200	0.9200
6	0.9200	0.8700	0.8900	0.9000
7	0.9200	0.8200	0.8600	0.8800
8	0.9100	0.7800	0.8300	0.8600
9	0.9100	0.7300	0.8000	0.8300
10	0.9100	0.6900	0.7700	0.8200
11	0.9100	0.6400	0.7400	0.8000
12	0.9000	0.6000	0.7100	0.7700
13	0.8900	0.5500	0.6800	0.7500
14	0.8900	0.5100	0.6500	0.7300
15	0.8800	0.4600	0.6200	0.7000
16	0.8800	0.4200	0.5900	0.6900
17	0.8700	0.3700	0.5600	0.6600
18	0.8600	0.3300	0.5300	0.6400
19	0.8600	0.2800	0.5000	0.6200
20+	0.7800	0.2400	0.4400	0.5500

Death Rate				Fiscal Year				Annual Improvement
Age	2014	2015	2016	2017	2018	2019	2020	2021+
17	0.00016	0.00016	0.00015	0.00015	0.00015	0.00015	0.00015	0.010
18	0.00010	0.00010	0.00013	0.00013	0.00013	0.00013	0.00013	0.010
19	0.00014	0.00014	0.00014	0.00013	0.00013	0.00013	0.00013	0.010
20	0.00013	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.010
21	0.00013	0.00014	0.00014	0.00013	0.00013	0.00012	0.00012	0.010
22	0.00011	0.00015	0.00015	0.00015	0.00015	0.00013	0.00013	0.010
23	0.00017	0.00017	0.00016	0.00016	0.00016	0.00016	0.00016	0.010
24	0.00018	0.00018	0.00018	0.00017	0.00017	0.00017	0.00017	0.010
25	0.00019	0.00018	0.00018	0.00018	0.00018	0.00017	0.00017	0.010
26	0.00018	0.00018	0.00018	0.00017	0.00017	0.00017	0.00017	0.010
27	0.00018	0.00018	0.00017	0.00017	0.00017	0.00017	0.00017	0.010
28	0.00018	0.00018	0.00018	0.00017	0.00017	0.00017	0.00017	0.010
29	0.00019	0.00019	0.00018	0.00018	0.00018	0.00018	0.00017	0.010
30	0.00020	0.00020	0.00019	0.00019	0.00019	0.00019	0.00018	0.010
31	0.00022	0.00022	0.00022	0.00021	0.00021	0.00021	0.00020	0.010
32	0.00025	0.00025	0.00024	0.00024	0.00024	0.00023	0.00023	0.010
33	0.00028	0.00028	0.00027	0.00027	0.00027	0.00026	0.00026	0.010
34	0.00031	0.00030	0.00030	0.00029	0.00029	0.00028	0.00028	0.010
35	0.00032	0.00032	0.00031	0.00031	0.00030	0.00030	0.00030	0.010
36	0.00034	0.00033	0.00033	0.00032	0.00032	0.00032	0.00031	0.010
37	0.00036	0.00036	0.00035	0.00035	0.00034	0.00034	0.00034	0.010
38	0.00040	0.00040	0.00039	0.00039	0.00038	0.00038	0.00037	0.010
39	0.00046	0.00046	0.00045	0.00045	0.00044	0.00044	0.00043	0.010
40	0.00054	0.00053	0.00053	0.00052	0.00052	0.00051	0.00050	0.010
41	0.00061	0.00061	0.00060	0.00059	0.00059	0.00058	0.00058	0.010
42	0.00067	0.00066	0.00066	0.00065	0.00064	0.00064	0.00063	0.010
43	0.00071	0.00071	0.00070	0.00069	0.00068	0.00068	0.00067	0.010
44	0.00075	0.00074	0.00073	0.00072	0.00072	0.00071	0.00070	0.010
45	0.00079	0.00078	0.00077	0.00076	0.00075	0.00075	0.00074	0.010
46	0.00085	0.00084	0.00084	0.00083	0.00082	0.00081	0.00080	0.010
47	0.00095	0.00094	0.00093	0.00092	0.00091	0.00090	0.00089	0.010
48	0.00104	0.00103	0.00102	0.00101	0.00100	0.00099	0.00098	0.010
49 50	0.00112 0.00119	0.00111 0.00118	0.00110 0.00117	0.00108 0.00116	0.00107 0.00115	0.00106 0.00113	0.00105 0.00112	0.010 0.010
51	0.00119	0.00118	0.00117	0.00116	0.00113	0.00113	0.00112	0.010
52	0.00126	0.00123	0.00123	0.00122	0.00121	0.00120	0.00118	0.010
53	0.00132	0.00131	0.00129	0.00128	0.00120	0.00123	0.00124	0.010
54	0.00148	0.00136	0.00137	0.00133	0.00134	0.00132	0.00131	0.010
55	0.00140	0.00148	0.00144	0.00142	0.00141	0.00133	0.00130	0.010
56	0.00150	0.00148	0.00146	0.00144	0.00142	0.00141	0.00139	0.010
57	0.00154	0.00152	0.00150	0.00148	0.00146	0.00144	0.00143	0.010
58	0.00165	0.00163	0.00160	0.00158	0.00156	0.00155	0.00153	0.010
59	0.00180	0.00177	0.00175	0.00173	0.00170	0.00169	0.00167	0.010
60	0.00196	0.00193	0.00191	0.00188	0.00186	0.00184	0.00182	0.010
61	0.00212	0.00209	0.00206	0.00203	0.00201	0.00199	0.00197	0.010
62	0.00226	0.00223	0.00220	0.00217	0.00215	0.00212	0.00210	0.010
63	0.00240	0.00237	0.00234	0.00231	0.00229	0.00226	0.00224	0.010
64	0.00257	0.00254	0.00251	0.00248	0.00246	0.00243	0.00241	0.010
65	0.00280	0.00277	0.00274	0.00271	0.00268	0.00265	0.00263	0.010
66	0.00309	0.00306	0.00303	0.00300	0.00296	0.00293	0.00290	0.010
67	0.00344	0.00341	0.00338	0.00334	0.00331	0.00328	0.00324	0.010
68	0.00380	0.00376	0.00373	0.00369	0.00365	0.00362	0.00358	0.010
69	0.00425	0.00421	0.00417	0.00412	0.00408	0.00404	0.00400	0.010
70	0.00481	0.00476	0.00472	0.00467	0.00462	0.00458	0.00453	0.010
71	0.00548	0.00543	0.00538	0.00532	0.00527	0.00522	0.00517	0.010
72	0.00626	0.00620	0.00614	0.00607	0.00601	0.00595	0.00589	0.010
73	0.00711	0.00704	0.00697	0.00690	0.00683	0.00677	0.00670	0.010
74	0.00802	0.00794	0.00787	0.00779	0.00771	0.00763	0.00756	0.010
75	0.00899	0.00890	0.00881	0.00873	0.00864	0.00855	0.00847	0.010

Death Rate w/ Survivor				Fiscal Year				Annual Improvement
Age	2014	2015	2016	2017	2018	2019	2020	2021+
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
18	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
19	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
20	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
21	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
22	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
23	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
24	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
25	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
26	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
27	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
28	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.010
29	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.010
30	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.010
31	0.00010	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.010
32	0.00009	0.00009	0.00008	0.00008	0.00008	0.00008	0.00008	0.010
33	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.010
34	0.00010	0.00010	0.00010	0.00010	0.00010	0.00009	0.00009	0.010
35	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00011	0.010
36	0.00014	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.010
37	0.00014	0.00014	0.00014	0.00014	0.00014	0.00013	0.00013	0.010
38	0.00016	0.00016	0.00016	0.00016	0.00015	0.00015	0.00015	0.010
39	0.00020	0.00020	0.00020	0.00019	0.00019	0.00019	0.00019	0.010
40	0.00024	0.00024	0.00024	0.00023	0.00023	0.00023	0.00023	0.010
41	0.00027	0.00027	0.00027	0.00026	0.00026	0.00026	0.00026	0.010
42	0.00029	0.00029	0.00029	0.00028	0.00028	0.00028	0.00028	0.010
43	0.00032	0.00032	0.00031	0.00031	0.00031	0.00030	0.00030	0.010
44	0.00036	0.00035	0.00035	0.00035	0.00034	0.00034	0.00034	0.010
45	0.00040	0.00039	0.00039	0.00038	0.00038	0.00038	0.00037	0.010
46	0.00044	0.00043	0.00043	0.00042	0.00042	0.00041	0.00041	0.010
47	0.00047	0.00046	0.00046	0.00045	0.00045	0.00044	0.00044	0.010
48	0.00048	0.00047	0.00047	0.00046	0.00046	0.00045	0.00045	0.010
49	0.00048	0.00048	0.00047	0.00047	0.00046	0.00046	0.00045	0.010
50	0.00051	0.00051	0.00050	0.00049	0.00049	0.00048	0.00048	0.010
51	0.00056	0.00055	0.00054	0.00054	0.00053	0.00053	0.00052	0.010
52	0.00059	0.00059	0.00058	0.00057	0.00057	0.00056	0.00056	0.010
53	0.00062	0.00061	0.00061	0.00060	0.00059	0.00059	0.00058	0.010
54	0.00063	0.00062	0.00061	0.00060	0.00060	0.00059	0.00058	0.010
55	0.00061	0.00060	0.00059	0.00058	0.00058	0.00057	0.00056	0.010
56	0.00060	0.00059	0.00058	0.00057	0.00057	0.00056	0.00055	0.010
57	0.00064	0.00063	0.00062	0.00061	0.00060	0.00060	0.00059	0.010
58	0.00069	0.00068	0.00067	0.00066	0.00065	0.00065	0.00064	0.010
59	0.00070	0.00069	0.00068	0.00067	0.00066	0.00065	0.00065	0.010
60	0.00068	0.00067	0.00066	0.00065	0.00064	0.00064	0.00063	0.010
61	0.00072	0.00071	0.00070	0.00069	0.00068	0.00067	0.00067	0.010
62	0.00077	0.00076	0.00075	0.00074	0.00074	0.00073	0.00072	0.010
63	0.00079	0.00078	0.00077	0.00076	0.00075	0.00075	0.00074	0.010
64	0.00077	0.00076	0.00075	0.00074	0.00074	0.00073	0.00072	0.010
65	0.00082	0.00081	0.00080	0.00080	0.00079	0.00078	0.00077	0.010
66	0.00088	0.00087	0.00086	0.00085	0.00084	0.00083	0.00082	0.010
67	0.00091	0.00090	0.00090	0.00089	0.00088	0.00087	0.00086	0.010
68	0.00098	0.00097	0.00096	0.00095	0.00094	0.00093	0.00093	0.010
69	0.00123	0.00122	0.00120	0.00119	0.00118	0.00117	0.00116	0.010
70	0.00137	0.00136	0.00134	0.00133	0.00132	0.00130	0.00129	0.010
71	0.00123	0.00122	0.00121	0.00120	0.00119	0.00117	0.00116	0.010
72	0.00100	0.00099	0.00098	0.00097	0.00096	0.00095	0.00094	0.010
73	0.00095	0.00094	0.00093	0.00092	0.00091	0.00090	0.00089	0.010
74	0.00095	0.00094	0.00093	0.00092	0.00091	0.00090	0.00089	0.010
75	0.00095	0.00094	0.00093	0.00092	0.00091	0.00090	0.00089	0.010

Table 7
Demographic Assumptions

	Non-Disab	oility Annuita	ant Death Ra	te			Death Rate f	or Spouse Surv	ivors of Femal	les					
		-	Fie	cal Year				•	Durati				Duration 1	Duration 2	Annual Improvement
Age	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2020	2020	2021+
17	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
18	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
19	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
20	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
21	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
22	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
23	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
24	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
25	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
26	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
27	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
28	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
29	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
30	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
31	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
32	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
33	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
34	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
35	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00026	0.00026	0.00025	0.00025	0.00025	0.00025	0.0126	0.0193	0.0100
36	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00056	0.00055	0.00055	0.00055	0.00054	0.00054	0.0085	0.0093	0.0100
37	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00095	0.00094	0.00094	0.00093	0.00092	0.00091	0.0084	0.0035	0.0100
38	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00162	0.00160	0.00159	0.00158	0.00156	0.00155	0.0111	0.0013	0.0100
39	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00248	0.00247	0.00245	0.00243	0.00240	0.00238	0.0146	0.0017	0.0100
40	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00305	0.00303	0.00301	0.00298	0.00295	0.00292	0.0156	0.0035	0.0100
41	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00279	0.00277	0.00275	0.00273	0.00270	0.00268	0.0118	0.0061	0.0100
42	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00208	0.00207	0.00205	0.00204	0.00202	0.00200	0.0060	0.0089	0.0100
43	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00227	0.00226	0.00224	0.00222	0.00220	0.00218	0.0013	0.0104	0.0100
44	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00323	0.00321	0.00319	0.00316	0.00313	0.00310	0.0000	0.0090	0.0100
45	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00342	0.00340	0.00337	0.00334	0.00331	0.00328	0.0000	0.0055	0.0100
46	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00333	0.00331	0.00328	0.00326	0.00323	0.00319	0.0015	0.0029	0.0100
47	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00429	0.00426	0.00423	0.00419	0.00415	0.00411	0.0050	0.0029	0.0100
48	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00569	0.00565	0.00561	0.00556	0.00551	0.00546	0.0075	0.0051	0.0100
49	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00742	0.00737	0.00731	0.00725	0.00718	0.00711	0.0066	0.0067	0.0100
50	0.00281	0.00279	0.00277	0.00275	0.00272	0.00269	0.00694	0.00690	0.00684	0.00678	0.00672	0.00665	0.0040	0.0060	0.0100
51	0.00275	0.00273	0.00271	0.00268	0.00266	0.00263	0.00594	0.00590	0.00585	0.00580	0.00575	0.00569	0.0023	0.0047	0.0100
52	0.00351	0.00349	0.00346	0.00343	0.00339	0.00336	0.00630	0.00625	0.00620	0.00615	0.00609	0.00603	0.0031	0.0049	0.0100
53	0.00355	0.00352	0.00348	0.00345	0.00342	0.00338	0.00796	0.00790	0.00784	0.00777	0.00770	0.00763	0.0057	0.0076	0.0100
54	0.00358	0.00354	0.00351	0.00347	0.00344	0.00341	0.00851	0.00845	0.00839	0.00832	0.00824	0.00816	0.0092	0.0134	0.0100
55	0.00392	0.00387	0.00383	0.00379	0.00375	0.00372	0.00986	0.00979	0.00971	0.00963	0.00954	0.00945	0.0098	0.0170	0.0100
56	0.00362	0.00358	0.00354	0.00350	0.00347	0.00343	0.01103	0.01095	0.01086	0.01076	0.01066	0.01055	0.0078	0.0140	0.0100
57	0.00414	0.00409	0.00405	0.00400	0.00396	0.00392	0.01176	0.01166	0.01156	0.01145	0.01134	0.01122	0.0066	0.0092	0.0100
58	0.00416	0.00411	0.00406	0.00401	0.00397	0.00393	0.01215	0.01203	0.01191	0.01179	0.01168	0.01156	0.0075	0.0089	0.0100
59	0.00453	0.00448	0.00442	0.00437	0.00432	0.00428	0.01155	0.01142	0.01130	0.01118	0.01106	0.01095	0.0095	0.0111	0.0100
60	0.00467	0.00460	0.00455	0.00449	0.00445	0.00440	0.01048	0.01035	0.01022	0.01011	0.01000	0.00990	0.0105	0.0124	0.0100
61	0.00506	0.00500	0.00493	0.00488	0.00482	0.00477	0.01293	0.01275	0.01259	0.01244	0.01230	0.01218	0.0110	0.0115	0.0100
62	0.00560	0.00552	0.00545	0.00539	0.00533	0.00527	0.01321	0.01301	0.01283	0.01266	0.01252	0.01240	0.0123	0.0121	0.0100
63	0.00606	0.00598	0.00590	0.00583	0.00577	0.00571	0.01452	0.01429	0.01408	0.01390	0.01374	0.01360	0.0132	0.0132	0.0100
64	0.00707	0.00698	0.00689	0.00681	0.00674	0.00667	0.01526	0.01501	0.01479	0.01459	0.01442	0.01428	0.0099	0.0133	0.0100
65	0.00764	0.00754	0.00745	0.00736	0.00728	0.00721	0.01301	0.01280	0.01261	0.01245	0.01231	0.01218	0.0083	0.0148	0.0100

Table 7
Demographic Assumptions

	Non-Disab	oility Annuita	ınt Death Rat	e			Death Rate	for Spouse Surv	ivors of Fema	les					
			Fisc	cal Year					Durati	on 3+			Duration 1	Duration 2	Annual Improvement
Age	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2020	2020	2021+
66	0.00797	0.00787	0.00777	0.00769	0.00760	0.00753	0.01522	0.01498	0.01477	0.01458	0.01441	0.01427	0.0112	0.0182	0.0100
67	0.00877	0.00866	0.00856	0.00846	0.00837	0.00829	0.02136	0.02105	0.02076	0.02050	0.02027	0.02007	0.0171	0.0209	0.0100
68	0.01055	0.01042	0.01030	0.01019	0.01008	0.00998	0.02221	0.02190	0.02162	0.02136	0.02113	0.02091	0.0222	0.0235	0.0100
69	0.01154	0.01140	0.01127	0.01114	0.01103	0.01092	0.02571	0.02538	0.02507	0.02478	0.02451	0.02427	0.0229	0.0263	0.0100
70	0.01203	0.01189	0.01176	0.01163	0.01151	0.01140	0.02988	0.02952	0.02917	0.02885	0.02855	0.02826	0.0252	0.0301	0.0100
71	0.01402	0.01386	0.01371	0.01356	0.01342	0.01329	0.03338	0.03299	0.03262	0.03227	0.03193	0.03161	0.0311	0.0305	0.0100
72	0.01561	0.01543	0.01527	0.01511	0.01495	0.01480	0.03657	0.03615	0.03575	0.03537	0.03501	0.03466	0.0383	0.0327	0.0100
73	0.01733	0.01715	0.01697	0.01679	0.01662	0.01645	0.03887	0.03844	0.03802	0.03761	0.03722	0.03685	0.0400	0.0378	0.0100
74	0.01830	0.01811	0.01792	0.01774	0.01756	0.01738	0.03955	0.03911	0.03868	0.03827	0.03788	0.03750	0.0379	0.0407	0.0100
75	0.02213	0.02191	0.02169	0.02147	0.02126	0.02104	0.04234	0.04187	0.04142	0.04098	0.04056	0.04016	0.0388	0.0380	0.0100
76	0.02453	0.02428	0.02404	0.02380	0.02357	0.02333	0.04606	0.04556	0.04507	0.04460	0.04415	0.04371	0.0460	0.0356	0.0100
77	0.02834	0.02807	0.02779	0.02752	0.02725	0.02698	0.04858	0.04807	0.04757	0.04708	0.04660	0.04613	0.0516	0.0422	0.0100
78	0.03051	0.03022	0.02993	0.02964	0.02935	0.02906	0.05663	0.05605	0.05548	0.05492	0.05436	0.05382	0.0543	0.0544	0.0100
79	0.03469	0.03437	0.03405	0.03372	0.03339	0.03306	0.06750	0.06684	0.06618	0.06552	0.06487	0.06422	0.0571	0.0620	0.0100
80	0.03816	0.03782	0.03747	0.03711	0.03675	0.03638	0.07420	0.07350	0.07279	0.07208	0.07137	0.07066	0.0599	0.0726	0.0100
81	0.04351	0.04312	0.04273	0.04232	0.04191	0.04149	0.07881	0.07809	0.07736	0.07662	0.07587	0.07511	0.0617	0.0843	0.0100
82	0.04926	0.04883	0.04838	0.04793	0.04747	0.04699	0.08404	0.08330	0.08253	0.08175	0.08096	0.08015	0.0737	0.0869	0.0100
83	0.05619	0.05570	0.05520	0.05469	0.05416	0.05362	0.09041	0.08963	0.08882	0.08800	0.08715	0.08628	0.0918	0.0831	0.0100
84	0.06211	0.06158	0.06104	0.06047	0.05989	0.05929	0.09832	0.09750	0.09664	0.09575	0.09483	0.09388	0.1049	0.0899	0.0100
85	0.06861	0.06804	0.06744	0.06682	0.06618	0.06552	0.11155	0.11063	0.10967	0.10867	0.10763	0.10656	0.1075	0.1085	0.0100
86	0.07959	0.07893	0.07825	0.07753	0.07679	0.07602	0.12646	0.12544	0.12437	0.12325	0.12208	0.12086	0.1052	0.1278	0.0100
87	0.08864	0.08792	0.08716	0.08637	0.08555	0.08469	0.13075	0.12972	0.12863	0.12749	0.12628	0.12502	0.1095	0.1417	0.0100
88	0.09926	0.09847	0.09764	0.09676	0.09584	0.09488	0.14024	0.13917	0.13803	0.13681	0.13552	0.13417	0.1321	0.1414	0.0100
89	0.11235	0.11147	0.11054	0.10956	0.10852	0.10743	0.15663	0.15549	0.15425	0.15291	0.15149	0.14997	0.1566	0.1434	0.0100
90	0.12279	0.12185	0.12084	0.11977	0.11864	0.11746	0.16455	0.16342	0.16217	0.16080	0.15932	0.15773	0.1662	0.1520	0.0100
91	0.14413	0.14309	0.14198	0.14079	0.13953	0.13821	0.18460	0.18348	0.18221	0.18080	0.17924	0.17753	0.1631	0.1713	0.0095
92	0.15654	0.15548	0.15434	0.15312	0.15183	0.15046	0.20562	0.20451	0.20322	0.20176	0.20013	0.19832	0.1621	0.1977	0.0090
93	0.17484	0.17374	0.17255	0.17127	0.16991	0.16847	0.22409	0.22294	0.22162	0.22011	0.21843	0.21657	0.1808	0.2255	0.0085
94	0.19413	0.19300	0.19177	0.19044	0.18902	0.18751	0.25022	0.24902	0.24762	0.24604	0.24427	0.24231	0.2231	0.2532	0.0080
95	0.21977	0.21859	0.21730	0.21590	0.21439	0.21278	0.27059	0.26937	0.26795	0.26635	0.26455	0.26256	0.2760	0.2821	0.0075
96	0.23618	0.23502	0.23374	0.23235	0.23084	0.22923	0.29315	0.29192	0.29049	0.28886	0.28704	0.28504	0.3144	0.3075	0.0070
97	0.25212	0.25100	0.24976	0.24839	0.24690	0.24530	0.32110	0.31985	0.31839	0.31674	0.31489	0.31284	0.3153	0.3083	0.0065
98	0.27771	0.27661	0.27536	0.27399	0.27248	0.27085	0.34381	0.34257	0.34114	0.33950	0.33767	0.33564	0.3162	0.3092	0.0060
99	0.29338	0.29235	0.29117	0.28985	0.28840	0.28682	0.36600	0.36479	0.36339	0.36179	0.36000	0.35802	0.3171	0.3100	0.0055
100	0.30886	0.30791	0.30681	0.30557	0.30419	0.30267	0.37342	0.37230	0.37100	0.36952	0.36785	0.36601	0.3179	0.3109	0.0050
101	0.32384	0.32297	0.32195	0.32079	0.31949	0.31806	0.37371	0.37270	0.37152	0.37018	0.36869	0.36703	0.3188	0.3118	0.0045
102	0.34557	0.34474	0.34378	0.34268	0.34144	0.34008	0.37399	0.37309	0.37204	0.37085	0.36952	0.36804	0.3197	0.3126	0.0040
103	0.38543	0.38462	0.38368	0.38260	0.38140	0.38006	0.37427	0.37348	0.37257	0.37152	0.37035	0.36906	0.3206	0.3135	0.0035
104	0.40381	0.40309	0.40224	0.40127	0.40019	0.39899	0.37455	0.37387	0.37309	0.37219	0.37119	0.37007	0.3215	0.3143	0.0030
105	0.40412	0.40351	0.40281	0.40200	0.40110	0.40009	0.37483	0.37427	0.37361	0.37286	0.37203	0.37110	0.3224	0.3152	0.0025
106	0.40258	0.40209	0.40153	0.40089	0.40017	0.39936	0.37511	0.37466	0.37414	0.37354	0.37287	0.37212	0.3232	0.3161	0.0020
107	0.40421	0.40385	0.40343	0.40294	0.40240	0.40179	0.37539	0.37505	0.37466	0.37421	0.37371	0.37315	0.3241	0.3169	0.0015
108	0.41130	0.41106	0.41077	0.41044	0.41007	0.40966	0.37567	0.37545	0.37519	0.37489	0.37455	0.37417	0.3250	0.3178	0.0010
109	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.0000	1.0000	0.0000

Table 7
Demographic Assumptions

	Disability		Death Rate Disabled		Non-	Death Term of Disa	hility	Surv	vivor Spouse Remar	riage		n. w/ a Reduced
Age	Retirement Rate	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Age Ret	Dis Ret
17	0.00000	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
18	0.00000	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
19	0.00000	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
20	0.00000	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
21	0.00000	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
22	0.00000	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
23	0.00093	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
24	0.00073	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
25	0.00058	0.00000	0.00000	0.00296	0.00516	0.00000	0.00080	0.05054	0.06045	0.08354	0.00000	0.00000
26	0.00047	0.00000	0.00123	0.00093	0.00703	0.00000	0.00423	0.05054	0.06045	0.08354	0.35233	0.30247
27	0.00041	0.00577	0.00476	0.00000	0.00654	0.00336	0.00711	0.05054	0.06045	0.08354	0.35233	0.30247
28	0.00041	0.01149	0.00702	0.00011	0.00410	0.00599	0.00946	0.05054	0.06045	0.08354	0.35233	0.30247
29	0.00042	0.01558	0.00791	0.00131	0.00166	0.00736	0.01145	0.05054	0.06045	0.08354	0.35233	0.30247
30	0.00042	0.01606	0.00777	0.00327	0.00076	0.00717	0.01434	0.05054	0.06045	0.08354	0.35233	0.30247
31	0.00058	0.01389	0.00671	0.00527	0.00180	0.00639	0.01694	0.05054	0.06045	0.08354	0.35233	0.30247
32	0.00070	0.00982	0.00654	0.00657	0.00386	0.00555	0.01626	0.05054	0.06045	0.08354	0.35233	0.30247
33	0.00086	0.00617	0.00810	0.00652	0.00491	0.00625	0.01292	0.05054	0.06045	0.08354	0.35233	0.30247
34	0.00103	0.00468	0.01037	0.00644	0.00315	0.00760	0.00969	0.05054	0.06045	0.08354	0.35233	0.30247
35	0.00123	0.00578	0.01123	0.00615	0.00121	0.00701	0.01084	0.05054	0.06045	0.08354	0.35233	0.30247
36	0.00125	0.00782	0.01128	0.00582	0.00075	0.00605	0.01341	0.06040	0.09549	0.08858	0.35426	0.30247
37	0.00168	0.01025	0.00942	0.00503	0.00147	0.00615	0.01207	0.05977	0.11149	0.08351	0.35586	0.30247
38	0.00192	0.01247	0.00818	0.00505	0.00200	0.00790	0.01071	0.05038	0.11094	0.07017	0.35712	0.30247
39	0.00172	0.01247	0.01027	0.0077	0.00233	0.00730	0.00869	0.03837	0.09717	0.05342	0.35804	0.30247
40	0.00241	0.01293	0.01027	0.00647	0.00233	0.00917	0.00898	0.02846	0.07674	0.04198	0.35863	0.30247
41	0.00266	0.01454	0.01018	0.00628	0.00264	0.00605	0.01044	0.02173	0.05689	0.03927	0.35889	0.30247
42	0.00291	0.01744	0.01063	0.00675	0.00275	0.00469	0.00985	0.01739	0.04279	0.04263	0.35880	0.30247
43	0.00251	0.02040	0.01144	0.00817	0.00186	0.00499	0.00909	0.01499	0.03439	0.04196	0.35839	0.30247
44	0.00338	0.01880	0.01294	0.00852	0.00181	0.00708	0.00756	0.01291	0.03102	0.03671	0.35764	0.30247
45	0.00360	0.01711	0.01735	0.01002	0.00163	0.00668	0.00626	0.01261	0.02996	0.02859	0.35655	0.30247
46	0.00379	0.01718	0.01914	0.00991	0.00137	0.00720	0.00604	0.01314	0.02810	0.02542	0.35513	0.30247
47	0.00397	0.01887	0.01758	0.01075	0.00187	0.00647	0.00584	0.01205	0.02644	0.02668	0.35338	0.30247
48	0.00413	0.02166	0.01684	0.01077	0.00287	0.00654	0.00644	0.01021	0.02703	0.02645	0.35130	0.30247
49	0.00427	0.02339	0.02095	0.01260	0.00276	0.00725	0.00600	0.01014	0.03005	0.02190	0.34888	0.30247
50	0.00438	0.02877	0.02431	0.01367	0.00304	0.00486	0.00491	0.01058	0.03273	0.01693	0.34614	0.30247
51	0.00448	0.03390	0.02288	0.01257	0.00491	0.00232	0.00477	0.00881	0.03056	0.01345	0.34308	0.30007
52	0.00455	0.03536	0.02475	0.01280	0.00352	0.00218	0.00462	0.00647	0.02385	0.01196	0.33969	0.29752
53	0.00461	0.04093	0.03056	0.01502	0.00174	0.00354	0.00391	0.00376	0.01359	0.00955	0.33599	0.29483
54	0.00466	0.04683	0.03282	0.01473	0.00174	0.00408	0.00385	0.00097	0.00264	0.00197	0.33196	0.29199
55	0.00472	0.04653	0.03184	0.01677	0.00148	0.00245	0.00293	0.00000	0.00000	0.00000	0.32763	0.28901
56	0.00478	0.04180	0.03030	0.01881	0.00141	0.00169	0.00317	0.00000	0.00000	0.00000	0.32299	0.28587
57	0.00487	0.04931	0.02910	0.01951	0.00149	0.00291	0.00303	0.00000	0.00000	0.00000	0.31805	0.28260
58	0.00499	0.05562	0.03069	0.01988	0.00184	0.00397	0.00221	0.00000	0.00000	0.00000	0.31282	0.27918
59	0.00516	0.05241	0.03193	0.02207	0.00189	0.00419	0.00209	0.00000	0.00000	0.00000	0.30729	0.27561
60	0.00540	0.05306	0.03744	0.02225	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.30149	0.27190
61	0.00573	0.05769	0.04266	0.02168	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.29541	0.26804
62	0.00617	0.06367	0.04116	0.02480	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.28906	0.26404
63	0.00673	0.06958	0.04245	0.02483	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.28246	0.25989
64	0.00743	0.07556	0.04367	0.02424	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.27561	0.25560
65	0.00830	0.08258	0.04508	0.02741	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.26853	0.25117
66	0.00934	0.09128	0.04579	0.02691	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.26123	0.24659
67	0.01058	0.10126	0.04498	0.02478	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.25371	0.24187

Table 7
Demographic Assumptions

	Disability Retirement		Death Rate Disabled	I	Non-	-Death Term of Disa	bility	Surv	vivor Spouse Remar	riage	Fraction of Ann Ben	
Age	Rate	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Dur<=1	Dur=2	Dur>=3	Age Ret	Dis Ret
68	0.01201	0.11100	0.04219	0.02684	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.24598	0.23701
69	0.01366	0.11864	0.03755	0.03347	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.23807	0.23200
70	0.01554	0.12260	0.03147	0.03361	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.22998	0.22686
71	0.01764	0.12260	0.03147	0.03543	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.22172	0.22156
72	0.01997	0.12260	0.03147	0.03663	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.21330	0.21613
73	0.02254	0.12260	0.03147	0.03947	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.20474	0.21055
74	0.02536	0.12260	0.03147	0.03982	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.19604	0.20483
75	0.00000	0.12260	0.03147	0.04562	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.18722	0.19896
76		0.12260	0.03147	0.05007	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.17828	0.19295
77		0.12260	0.03147	0.05011	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.16923	0.18680
78		0.12260	0.03147	0.05446	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.16008	0.18050
79		0.12260	0.03147	0.05745	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.15083	0.17406
80		0.12260	0.03147	0.06299	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.14149	0.16747
81		0.12260	0.03147	0.06831	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.13206	0.16074
82		0.12260	0.03147	0.07174	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.12255	0.15387
83		0.12260	0.03147	0.08317	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.11296	0.14684
84		0.12260	0.03147	0.09227	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.10329	0.13968
85		0.12260	0.03147	0.10301	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.09355	0.13237
86		0.12260	0.03147	0.10854	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.08374	0.12491
87		0.12260	0.03147	0.11905	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.07385	0.11731
88		0.12260	0.03147	0.12827	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.06389	0.10956
89		0.12260	0.03147	0.14167	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.05385	0.10167
90		0.12260	0.03147	0.15143	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.04375	0.09364
91		0.12260	0.03147	0.17541	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.03357	0.08545
92		0.12260	0.03147	0.19513	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.02332	0.07713
93		0.12260	0.03147	0.20863	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
94		0.12260	0.03147	0.22643	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
95		0.12260	0.03147	0.24488	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
96		0.12260	0.03147	0.26369	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
97		0.12260	0.03147	0.27892	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
98		0.12260	0.03147	0.31000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
99		0.12260	0.03147	0.34645	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
100		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
101		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
102		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
103		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
104		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
105		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
106		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
107		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
108		0.12260	0.03147	0.36970	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866
109		1.00000	1.00000	1.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.01300	0.06866

CSRS AND FERS PLAN SUMMARIES

CSRS Basic Benefit

FERS Basic Benefit

REGULAR ANNUITY	Guaranteed annuity based on service and salary.	Guaranteed annuity based on service and salary.
ALTERNATIVE ANNUITY	Lump-sum payment generally available only to non-disability retirees with life-threatening or critical condition and only with spousal consent.	Lump-sum payment generally available only to non-disability retirees with life-threatening or critical condition and only with spousal consent.
COVERAGE	All employees hired prior to January 1, 1984, except for those who transferred to FERS during an open season.	All employees who were first employed in a covered position after December 31, 1983, or who were hired after December 31, 1986, with less than 5 years of creditable civilian service, or who transferred to FERS during an open season.
EMPLOYEE CONTRIBUTIONS	7.0% of total pay (does not apply to Special Employee groups).	Contribution for FERS basic benefit plus Social security taxes generally equals: FERS: 7.0% FERS-RAE: 9.3% FERS-FRAE: 10.6% Special employee groups contribute an additional 0.5% of pay.
REFUND OPTION	Withdrawal of contributions plus interest is allowed when leaving Federal employment. Interest is paid only to an employee with at least one year of covered service (but less than five years of total creditable civilian service). Contributions may be redeposited after reemployment with the Federal government for annuity credit.	Withdrawal of contributions plus interest is allowed when leaving Federal employment (employee must have more than one year of covered service to accrue interest). Effective for 2010 forward, contributions may be redeposited after reemployment with the Federal government for annuity credit.
COLAs	COLAs are paid annually to all annuitants. COLAs equal the rate of inflation as measured by the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).	COLAs are paid annually to retirees over age 62, to disability benefit recipients (after one year of payments), to survivor benefit recipients, and to certain other special groups. COLA is based on the Consumer Price Index (CPI-W) as follows: CPI COLA 0 to 2% CPI 2 to 3% 2% 3% or more CPI minus 1%

RETIREMENT BENEFITS

QUALIFICATIONS CSRS Basic Benefit FERS Basic Benefit

REGULAR RETIREMENT (benefits payable immediately upon retirement)	UNREDUCED BENEFITS: 55 years old with 30+ years of service; 60 years old with 20+ years of service; 62 years old with 5+ years of service REDUCED BENEFITS: Not Applicable	UNREDUCED BENEFITS: MRA (see table below) with 30+ years of service; 60 years old with 20+ years of service; 62 years old with 5+ years of service. REDUCED BENEFITS: MRA with 10+ years of service; reduction will be 5% per year for each year payment begins below age 62
DEFERRED RETIREMENT (delayed benefit payments)	UNREDUCED BENEFITS: 62 years old with 5+ years of civilian service.	UNREDUCED BENEFITS: 62+ years old with 5+ years of civilian service; 60+ years old with 20+ years of service; MRA with 30+ years of service.
	REDUCED BENEFITS: Not applicable	REDUCED BENEFITS: MRA with 10+ years of service; reduction will be 5% per year for each year payment begins before age 62
INVOLUNTARY / EARLY RETIREMENT	UNREDUCED BENEFITS: Not applicable	UNREDUCED BENEFITS: Any age with 25+ years of service OR 50+ years old with 20+ years of service
	REDUCED BENEFITS: Any age with 25+ years of service OR age 50 with 20+ years of service; reduction is 2% per year for each year payment begins before age 55.	REDUCED BENEFITS Not applicable; however, special retirement supplement does not begin until MRA.
AMOUNT OF ANNUITY	A retiree's annuity is based on an average of the retiree's highest three consecutive years of basic pay (high-three average salary =HT) and is calculated as follows:	A retiree's annuity is based on an average of the retiree's highest three consecutive years of basic pay in the Federal career (high-three average salary = HT) and is calculated as follows:
	(1.50% x HT x first 5 years) PLUS (1.75% x HT x second 5 years) PLUS (2.00% HT x all years of service over 10 years)	Generally: (1.0% x HT x # years of service) Age 62+ with 20+ years of service: (1.1 % x HT x # years of service)
SPECIAL RETIREMENT SUPPLEMENT	Not available	At the MRA with 30+ years of service OR at age 60 with 20+ years of service, payable (subject to an earnings test) until Social Security benefits are payable at age 62 (approximates the portion of a full-career Social Security benefit earned while under FERS); only payable when employee receives an immediate annuity.

DISABILITY BENEFITS

CSRS Basic Benefit

FERS Basic Benefit

QUALIFICATIONS	An employee must have 5 or more years of creditable civilian service. An employee must be unable to do his/her job and must not refuse a suitable vacancy within the agency in the same commuting area at the same grade or pay level as the current position. Disability benefits will end if the employee recovers from the disabling condition or earns more than 80% of the current salary of the position from which retired. Disabled employees may be required at times to prove continued disability.	An employee must have 18+ months of creditable civilian service and must apply for or show ineligibility for Social Security benefits. An employee must be unable to do his/her job and must not refuse a suitable vacancy within the agency in the same commuting area at the same grade or pay level as the current position. Disability benefits will end if the employee recovers from the disabling condition or earns more than 80% of the current salary of the position from which retired. Disabled employees may be required at times to prove continued disability.
AMOUNT OF BENEFITS	Benefits are equal to the lesser of (1) 40% of high-three average salary or (2) annuity computed according to the general formula after first increasing the time base as if the employee worked to age 60, unless actual earned annuity is greater.	Benefits differ depending on how many years an employee is disabled. During the first year of disability, FERS pays 60% of an employee's high-three average salary minus 100% of any Social Security benefits received. No COLAs are paid during this year. During the second year and any additional years of disability until an employee reaches age 62, the employee will receive 40% of his/her high-three average salary minus 60% of any Social security benefits received. COLAs are paid for these years. FERS disability benefits are recomputed at age 62 to equal the individual's non-disability benefit, including credit for the period the individual was receiving disability benefits, with the average salary increased by all FERS COLAs that were effective during the periods of disability. Whenever the individual's earned benefit based on years of service and average salary provide a higher benefit than that payable under the disability provisions, the person is entitled to the earned rate.

SURVIVOR BENEFITS

	CSRS Basic Benefit	FERS Basic Benefit
QUALIFICATIONS	Eligible survivors of an employee may receive benefits if the employee had at least 18 months of creditable civilian service. Eligible survivors may include current and former spouses and children who meet certain age and/or length of marriage requirements.	Eligible survivors of an employee may receive benefits if the employee had at least 18 months of creditable civilian service. Eligible survivors may include current and former spouses and children who meet certain age and/or length of marriage requirements.
AMOUNT OF BENEFITS	Survivor benefits are based on the relationship of the survivor and are calculated as follows:	Survivor benefits are based on the relationship of the survivor and the employee's length of Federal service and are calculated as follows:
Spouse of an employee who dies	55% of the disability annuity that would have been payable if the employee had retired on the date of death;	With 18 months to 10 years of service, lump-sum payment only; in 2015 the amount is \$32,326.58 plus the LARGER of (1) 50% of the employee's annual salary at death OR (2) 50% of the employee's HT; With 10+ years of service, lump sum payment as
		above plus annuity equal to 50% of the employee's accrued basic benefit.
Spouse of an annuitant who dies	Up to 55% of the retiree's annuity, depending on elected survivor benefit;	50% (or 25% if jointly elected by employee and spouse) of the retiree's annuity amount plus a special retirement supplement if the spouse is younger than age 60 and not yet eligible for Social Security benefits;
Spouse of an employee who dies	Refund of the deceased's retirement contributions only; no other benefits.	With less than 10 years of service, refund of contributions;
after leaving Federal service but before annuity payments begin		With 10+ years of service without a refund of contributions, 50% of the employee's accrued basic benefit beginning when the employee would have reached age 62.
Child(ren)	Varies according to the number of children and whether there is a surviving parent who was married to the employee.	Varies according to the number of children and whether there is a surviving parent who was married to the employee, reduced by Social Security benefits the child(ren) are entitled to receive.

CSRS Basic Benefit

FERS Basic Benefit

ANNUITY
REDUCTION TO
COVER
SURVIVOR
BENEFITS

A retiree's annuity will be reduced as follows to provide for a survivor benefit:

First \$3,600 reduced 2.5%;

Amounts over \$3,600 reduced 10%.

Note: The 55% spouse's benefit is based on the amount of the annuity before this reduction is taken.

A retiree's annuity will be reduced 10% (or 5%) of the entire annual benefit in order to provide for a survivor benefit unless waived by both the retiree and the spouse.

Note: The 50% (or 25% if jointly elected by employee and spouse) spouse's benefit is based on the amount of the annuity before this reduction is taken.

MINIMUM RETIREMENT AGE (MRA) FOR FERS BASIC BENEFIT

Birth Year	MRA
Before 1948	55
1948	55 and 2 months
1949	55 and 4 months
1950	55 and 6 months
1951	55 & and 8 months
1952	55 and 10 months
1953-1964	56
1965	56 and 2 months
1966	56 and 4 months
1967	56 and 6 months
1968	56 and 8 months
1969	56 and 10 months
1970 and after	57