

United States Office Of Personnel Management

Civil Service Retirement and Disability Fund Annual Report

Fiscal Year Ended September 30, 2016



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Financial Section

CIVIL SERVICE RETIREMENT AND DISABILITY FUND
STATEMENTS OF NET ASSETS AVAILABLE FOR BENEFITS
As of September 30, 2016 and 2015 – Unaudited
(In Thousands)

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2016	Total Fund 2015
Assets:				
Investments, at Fair Value [Note 5]	\$296,291,194	\$ 590,869,579	\$887,160,773	\$731,266,603
Receivables:				
Contributions by Employers	62,401	1,466,226	1,528,627	1,247,645
Contributions by Participants	33,831	114,302	148,133	114,003
Accrued Interest on Investments	2,754,543	3,803,893	6,558,436	6,467,021
Other	86,589	236,793	323,382	991,384
Total Receivables	2,937,364	5,621,214	8,558,578	8,820,053
Cash [Note 3]	12,431	-	12,431	140,619,716
Total Assets	299,240,989	596,490,793	895,731,782	880,706,372
Liabilities:				
Annuities Benefits Payable	5,361,317	1,051,827	6,413,144	6,352,744
Refunds of Contributions Payable	2,859	3,522	6,381	57,010
Taxes, Insurance and Other				
Withholdings	630,334	253,230	883,564	871,289
Administrative and Other Liabilities	40,829	18,649	59,478	103,544
Total Liabilities	6,035,339	1,327,228	7,362,567	7,384,587
Net Assets Available for Benefits	\$293,205,650	\$595,163,565	\$888,369,215	\$873,321,785

The accompanying notes are an integral part of the financial statements.

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

**For the Years Ended September 30, 2016 and 2015 – Unaudited
(In Thousands)**

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2016	Total Fund 2015
Additions to Net Assets Attributable to:				
Investment Income:				
Interest	\$ 11,572,075	\$16,707,862	\$28,279,937	\$28,382,758
Contributions:				
Employer	722,117	29,049,276	29,771,393	28,005,212
Employees	902,619	2,580,367	3,482,986	3,202,443
Special	33,155,055	2,869,063	36,024,118	36,844,562
Total Contributions	34,779,791	34,498,706	69,278,497	68,052,217
Total Additions to Net Assets	46,351,866	51,206,568	97,558,434	96,434,975
Deductions from Net Assets Attributable to:				
Annuities:				
Retirees	60,398,818	12,033,916	72,432,734	71,371,782
Survivors	9,100,601	479,864	9,580,465	9,695,943
Total Annuities	69,499,419	12,513,780	82,013,199	81,067,725
Refunds of Contributions	202,219	129,545	331,764	436,209
Transfer to Other Retirement System	7,627	-	7,627	7,674
Administrative and Other Expenses	114,816	43,598	158,414	158,837
Total Deductions from Net Assets	68,824,081	12,686,923	82,511,004	81,670,445
Net Increase (Decrease) in Net Assets	(23,472,215)	38,519,645	15,047,430	14,764,530
Net Assets Available for Benefits:				
Beginning of Year	316,677,865	556,643,920	873,321,785	858,557,255
End of Year	\$293,205,650	\$595,163,565	\$888,369,215	\$873,321,785

The accompanying notes are an integral part of the financial statements.

CIVIL SERVICE RETIREMENT AND DISABILITY FUND
STATEMENTS OF ACTUARIAL PRESENT VALUE OF ACCUMULATED PLAN BENEFITS
As of September 30, 2015 and 2014 – Unaudited
(In Millions)

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2015	Total Fund 2014
Actuarial Present Value of Accumulated Plan Benefits:				
Participants Receiving Benefits	\$920,500	\$177,100	\$1,097,600	\$1,094,200
Participants Not Receiving Benefits	124,700	305,600	430,300	436,700
Total Actuarial Present Value of Accumulated Plan Benefits	<u>\$1,045,200</u>	<u>\$482,700</u>	<u>\$1,527,900</u>	<u>\$1,530,900</u>

CIVIL SERVICE RETIREMENT & DISABILITY FUND
**STATEMENTS OF CHANGES IN ACTUARIAL
PRESENT VALUE OF ACCUMULATED PLAN BENEFITS**
For the Years Ended September 30, 2015 and 2014 – Unaudited
(In Millions)

	Civil Service Retirement System	Federal Employees Retirement System	Total Fund 2015	Total Fund 2014
Actuarial Present Value of Accumulated Plan Benefits at Beginning of Year	\$1,080,700	\$450,200	\$1,530,900	\$1,510,900
Increase (Decrease) During the Year Attributable to:				
Benefits Accumulated, Less Benefits Paid	(35,500)	32,500	(3,000)	20,000
Changes in Actuarial Assumptions	-	-	-	-
Net Increase (Decrease)	<u>(35,500)</u>	<u>32,500</u>	<u>(3,000)</u>	<u>20,000</u>
Actuarial Present Value of Accumulated Plan Benefits at End of Year	<u>\$1,045,200</u>	<u>\$482,700</u>	<u>\$1,527,900</u>	<u>\$1,530,900</u>

**CIVIL SERVICE RETIREMENT & DISABILITY FUND
SCHEDULE OF INVESTMENTS
AS OF SEPTEMBER 30, 2016**

<u>MATURITY</u> <u>DATE</u>	<u>SECURITY</u>	<u>INTEREST</u> <u>RATE</u>	<u>PAR</u> <u>VALUE</u>	<u>TOTAL</u>
<u>2017</u>				
30-Jun-17	C of I	1.625%	39,139,603,000.00	
30-Jun-17	Special Bonds	4.125%	1,022,095,000.00	
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	
Subtotal			80,845,080,000.00	80,845,080,000.00
<u>2018</u>				
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	1.875%	936,036,000.00	
30-Jun-18	Special Bonds	2.000%	451,947,000.00	
30-Jun-18	Special Bonds	2.000%	442,654,000.00	
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			56,364,330,000.00	56,364,330,000.00
<u>2019</u>				
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	1.875%	936,036,000.00	
30-Jun-19	Special Bonds	2.000%	451,947,000.00	
30-Jun-19	Special Bonds	2.000%	442,654,000.00	
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		<u>55,951,811,000.00</u>	55,951,811,000.00

2020

30-Jun-20	Special Bonds	1.375%	1,056,062,000.00	
30-Jun-20	Special Bonds	1.750%	262,109,000.00	
30-Jun-20	Special Bonds	1.750%	859,726,000.00	
30-Jun-20	Special Bonds	1.875%	936,036,000.00	
30-Jun-20	Special Bonds	2.000%	451,947,000.00	
30-Jun-20	Special Bonds	2.000%	442,654,000.00	
30-Jun-20	Special Bonds	2.250%	845,914,000.00	
30-Jun-20	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	
	Subtotal		<u>55,934,730,000.00</u>	55,934,730,000.00

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	1.875%	936,036,000.00	
30-Jun-21	Special Bonds	2.000%	451,947,000.00	
30-Jun-21	Special Bonds	2.000%	442,654,000.00	
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		<u>56,273,253,000.00</u>	56,273,253,000.00

2022

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	1.875%	936,036,000.00	
30-Jun-22	Special Bonds	2.000%	451,947,000.00	
30-Jun-22	Special Bonds	2.000%	442,654,000.00	
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	
	Subtotal		<u>56,276,040,000.00</u>	56,276,040,000.00

2023

30-Jun-23	Special Bonds	1.375%	1,056,062,000.00	
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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	1.875%	936,036,000.00	
30-Jun-23	Special Bonds	2.000%	451,946,000.00	
30-Jun-23	Special Bonds	2.000%	442,655,000.00	
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			<u>56,252,150,000.00</u>	56,252,150,000.00

2024

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	Special Bonds	1.750%	859,726,000.00	
30-Jun-24	Special Bonds	1.875%	936,036,000.00	
30-Jun-24	Special Bonds	2.000%	451,947,000.00	
30-Jun-24	Special Bonds	2.000%	442,655,000.00	
30-Jun-24	Special Bonds	2.250%	845,913,000.00	
30-Jun-24	Special Bonds	2.875%	51,695,533,000.00	
Subtotal			<u>56,549,981,000.00</u>	56,549,981,000.00

2025

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	1.875%	936,036,000.00	
30-Jun-25	Special Bonds	2.000%	451,947,000.00	
30-Jun-25	Special Bonds	2.000%	442,655,000.00	
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			<u>57,482,071,000.00</u>	57,482,071,000.00

2026

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	1.875%	936,036,000.00	
30-Jun-26	Special Bonds	2.000%	451,947,000.00	
30-Jun-26	Special Bonds	2.000%	442,655,000.00	
30-Jun-26	Special Bonds	2.250%	488,889,000.00	
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			<u>57,125,047,000.00</u>	57,125,047,000.00

2027

30-Jun-27	Special Bonds	1.375%	12,500,000,000.00	
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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	1.875%	936,037,000.00	
30-Jun-27	Special Bonds	1.375%	70,000,000.00	
30-Jun-27	Special Bonds	2.000%	451,947,000.00	
30-Jun-27	Special Bonds	2.000%	442,654,000.00	
	Subtotal		<u>56,636,158,000.00</u>	56,636,158,000.00
 <u>2028</u>				
30-Jun-28	Special Bonds	1.750%	45,794,000.00	
30-Jun-28	Special Bonds	1.750%	859,726,000.00	
30-Jun-28	Special Bonds	1.750%	6,595,220,000.00	
30-Jun-28	Special Bonds	1.750%	47,304,780,000.00	
30-Jun-28	Special Bonds	1.875%	936,036,000.00	
30-Jun-28	Special Bonds	2.000%	894,601,000.00	
	Subtotal		<u>56,636,157,000.00</u>	56,636,157,000.00
 <u>2029</u>				
30-Jun-29	Special Bonds	1.875%	936,036,000.00	
30-Jun-29	Special Bonds	2.000%	451,947,000.00	
30-Jun-29	Special Bonds	2.000%	442,654,000.00	
30-Jun-29	Special Bonds	2.250%	55,015,286,000.00	
	Subtotal		<u>56,845,923,000.00</u>	56,845,923,000.00
 <u>2030</u>				
30-Jun-30	Special Bonds	1.875%	936,036,000.00	
30-Jun-30	Special Bonds	2.000%	442,654,000.00	
30-Jun-30	Special Bonds	2.000%	56,103,380,000.00	
	Subtotal		<u>57,482,070,000.00</u>	57,482,070,000.00
 <u>2031</u>				
30-Jun-31	Special Bonds	1.875%	57,482,070,000.00	
	Subtotal		<u>57,482,070,000.00</u>	<u>57,482,070,000.00</u>
SUBTOTAL SPECIAL BONDS				874,136,871,000.00
FFB Bonds			<u>13,023,902,000.00</u>	
Subtotal			<u>13,023,902,000.00</u>	<u>13,023,902,000.00</u>
TOTAL INVESTMENTS AS OF SEPTEMBER 30, 2016				<u><u>887,160,773,000.00</u></u>

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

CIVIL SERVICE RETIREMENT AND DISABILITY FUND
NOTES TO FINANCIAL STATEMENTS
September 30, 2016 and 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 Civil Service Retirement Act, which was enacted on May 22, 1920. It is a stand-alone 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 Federal Employees' Retirement System Act of 1986, 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, 2016 and September 30, 2015, there were no Treasury bonds among the Fund’s investments. The 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’ provision to services 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 2016 and 2015:

Economic Assumptions:	2016	2015
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 2016 and 2015, 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 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 2016 and 2015 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 (13.2% during FY 2015 and 13.7% during FY 2016 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 11.1% during FY 2015 and 11.9% during FY 2016.

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, 2016 and 2015 (in millions):

	CSRS 2016	FERS 2016	Total 2016	Total 2015
GAS Securities:				
5.125% due 2021	\$18,776	\$25,929	\$44,705	\$44,705
5.000% due 2022	19,058	26,317	45,375	45,375
4.000% due 2023	19,828	27,381	47,209	47,209
2.875% due 2024	21,712	29,983	51,695	51,695
1.750% due 2028	19,868	27,437	47,305	53,946
2.250% due 2029	23,106	31,909	55,015	
2.000% due 2030	23,563	32,540	56,103	
1.875% due 2031	24,143	33,340	57,483	
Other GAS Securities	117,361	351,886	469,247	476,022
Total GAS Securities	287,415	586,722	874,137	718,952
Other Securities	8,876	4,148	13,024	12,315
Total Investments	\$296,291	\$ 590,870	\$ 887,161	\$ 731,267

Debt Issuance Suspension Period (DISP). During the DISP, which began on May 16, 2015 and was extended to November 2, 2015, the U.S. Treasury took extraordinary measures to avoid exceeding the statutory debt limit. Treasury fully restored the federal fund accounts to the condition they would have been in had there not been a debt issuance suspension period. Section 8348 of Title 5, U.S. Code, authorizes the Secretary of the Treasury to suspend additional investment of Treasury securities in the Civil Service Retirement and Disability Fund (CSRDF) if such additional investment could not be made without causing the public debt of the United States to exceed the public debt limit. In addition, the Secretary may sell or redeem securities, obligations, and other invested assets of the CSRDF before maturity in order to prevent the public debt from exceeding the public debt limit.

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.

Actuarial Section

General Information

Report for the Fiscal Year ended September 30, 2016

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 (9/30/2015):

Participants	CSRS	FERS	Total
Active employees*	159,000	2,529,000	2,688,000
Separated employees entitled to deferred benefits	5,000	50,000	55,000
Annuitants:			
<i>Retirees</i>	1,435,000	647,000	2,082,000
<i>Survivors</i>	495,000	59,000	554,000
Total annuitants	1,930,000	706,000	2,636,000

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, 2015

* 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, 2016, the members of the Board are:

Thomas S. Terry, Chair
Edwin C. Husted
R. Evan Inglis

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, 2015 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, 2015. There were a total of 2,688,000 employees as of this date, determined on a full-time equivalent basis, including 2,529,000 covered under FERS. The balance of 159,000 employees is covered under CSRS.

On a full-time equivalent basis, the active employee population as of September 30, 2015 is as follows:

CSRS-Offset:	24,000
CSRS:	<u>135,000</u>
CSRS Total:	159,000
FERS-Elect:	16,000
FERS:	2,182,000
FERS-RAE:	98,000
FERS-FRAE:	<u>233,000</u>
FERS Total:	2,529,000
CSRS+FERS Total:	2,688,000

The inactive population as of September 30, 2015, consists of: 2,082,000 retired employees (1,873,000 non-disability retirees, average age 72; and 209,000 disability retirees, average age 65); 459,000 spouse survivors of annuitants; 77,000 spouse survivors of employees; 18,000 child survivors; and 55,000 separated employees entitled to deferred benefits.

The population of active employees is based on data from OPM's Enterprise Human Resources Integration (EHRI) Statistical Data Mart and from the United States Postal Service. These sources provide demographic information for most employee participants in CSRS and FERS but do not contain records for some participants (e.g. Legislative and Judicial branch employees, security sensitive employees of Executive branch agencies). The population data is controlled to accounting records of employee withholdings and agency contributions in order to represent the complete full-time equivalent population of CSRS and FERS active employee participants.

There is no census data for separated employees entitled to a deferred annuity. This population is constructed at the time the demographic data is developed based on information about recent ascensions of new deferred annuitants. The assumed population of separated employees has been projected to the valuation date according to the employee demographic rate assumptions as applied to the prior populations.

The data for annuitants as of the beginning of the year (September 30, 2015) is obtained from the OPM annuity roll. In order to capture annuitants in special pay status as of the beginning of the fiscal year (i.e. individuals who recently became annuitants for whom the retirement claim is still being processed), the population data is obtained from the annuity roll in March during the fiscal year. A small adjustment is made to the data to account for annuitants retired as of the beginning of the year but still in special pay status in March.

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.

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 8, 2016, 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 \$3.3 billion in Fiscal Year 2015. This assumes dynamic normal cost percentages determined under the assumptions that were in effect at the time of determination of the FERS agency contribution rates in effect for FY 2015.

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, 2015, the unfunded actuarial liability amounted to \$789.6 billion. It represents the difference between the par value of net assets on September 30, 2015, \$873.3 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; |
| <i>less</i> | (2) | the present value of future normal cost contributions; |
| <i>less</i> | (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, 2015 amounted to \$0.5 billion for CSRS and \$30.9 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 \$425.2 billion as of September 30, 2015, 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, 2016:

Interest on Static Unfunded Liability (UL):	\$21.260 billion
30-year Amortization of Increases in Static UL:	\$ 8.494 billion
Military Service Payment:	\$ 3.620 billion
Other CSRS Funding Provisions:	\$ 0.058 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 \$3.232 billion was made on September 30, 2016. This amount included a new 30-year payment of \$0.033 billion to amortize a supplemental liability of \$0.5 billion as of September 30, 2015, 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 \$0.248 billion was due from the Postal Service to the CSRDF on September 30, 2016. This amount included a new 30-year payment of \$0.007 billion to amortize a supplemental liability of \$0.1 billion as of September 30, 2015, 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. As of the valuation date, payments of \$0.007 billion due September 30, 2014, and \$0.241 billion due September 30, 2015, remain unpaid to the CSRDF from the Postal Service.

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, 2015

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 dynamic long term assumptions used for 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 8, 2016, the Board of Actuaries recommended use of these assumptions for the actuarial valuation as of September 30, 2015. This report assumes a 1.3 percent general salary increase for 2016 based on the actual increase in the federal General Schedule salary tables. A 0.0 percent CSRS annuitant COLA and 0.0 percent FERS annuitant COLA are assumed in year 2016 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 upon the financial information provided by OPM's Office of the Chief Financial Officer, and upon population data provided by OPM's Office of Retirement Services, Chief Information Office and Data Analysis Group, and have reviewed 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 2016. 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:

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

Unfunded Actuarial Accrued Liability – September 30, 2015

	<u>CSRS</u>	<u>FERS</u>	<u>Total</u>
1. Actuarial Present Value of Future Benefits & Expenses			
(a) Annuitants on roll	\$920.5	\$177.1	\$1,097.6
(b) Separated Employees	1.4	4.2	5.6
(c) Active Employees	150.8	808.9	959.7
Total	1,072.7	990.2	2,062.9
2. Less: Present Value of Future Normal Costs:	16.3	383.7	400.0
3. Actuarial Accrued Liability	1,056.4	606.5	1,662.9
4. Assets (at Par Value)	316.8	556.5	873.3
5. Unfunded Actuarial Liability ¹	\$739.6	\$50.0	\$789.6

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)	<u>15.3%</u> ³	<u>0.0%</u>	<u>0.0%</u>	<u>(1.2%)</u> 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 2016 are determined as of September 30, 2015. The valuation of the CSRDF as of September 30, 2015, is based on the employee and annuitant populations as of that date.

The present values of future benefits and normal costs as of September 30, 2015, 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 1.3 percent is assumed in year 2016 to match the actual increase in federal General Schedule pay tables. A 0.0 percent CSRS annuitant COLA and 0.0 percent FERS annuitant COLA are assumed in year 2016 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, 2015, unfunded actuarial liability of \$739.6 billion shown for CSRS in Table 1 consists of an unfunded actuarial liability of \$722.9 billion for the non-Postal CSRS account and an unfunded actuarial liability of \$16.7 billion for the Postal CSRS account. The Table 1 September 30, 2015, unfunded actuarial liability of \$50.0 billion for FERS consists of an unfunded actuarial liability of \$46.1 billion for the non-Postal FERS account and an unfunded actuarial liability of \$3.9 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 2016 totaled approximately \$33.4 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 2016.

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 payments made by the Treasury and by the Postal Service as required under CSRS statute, excess contributions required for FERS-FRAE from non-Postal employing agencies, plus transfers from the non-Postal FERS account to the non-Postal 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. The present values of projected future funding components are shown in Table 1D.

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, 2015. The projected future cash flow is as follows:

FY	(Dollars in Millions)				(Dollars in Millions)			
	CSRS		Normal Costs	FERS		Normal Costs		
Benefits: Annuitants	Benefits: Separated Employees	Benefits: Active Employees		Benefits: Annuitants	Benefits: Separated Employees		Benefits: Active Employees	
2016	\$ 69,074	\$ 7	\$ 936	\$ 11,503	\$ 1	\$ 1,154	\$ 30,433	
2017	68,236	20	2,470	11,476	25	2,926	30,438	
2018	67,853	33	3,813	11,514	49	4,825	30,460	
2019	67,423	45	5,010	11,546	74	6,906	30,365	
2020	66,940	57	6,083	11,556	99	9,186	30,175	
2021	66,398	67	7,044	11,552	122	11,657	29,888	
2022	65,793	77	7,914	11,567	145	14,287	29,499	
2023	65,118	86	8,687	11,632	166	17,068	29,007	
2024	64,365	93	9,377	11,683	185	19,985	28,427	
2025	63,526	98	9,986	11,714	195	22,968	27,798	
2026	62,592	102	10,525	11,723	206	26,047	27,115	
2027	61,558	106	11,003	11,711	225	29,327	26,352	
2028	60,416	108	11,422	11,677	244	32,756	25,525	
2029	59,162	110	11,783	11,614	262	36,323	24,637	
2030	57,789	112	12,093	11,521	278	39,999	23,698	
2031	56,294	114	12,355	11,398	292	43,765	22,711	
2032	54,674	116	12,566	11,243	305	47,587	21,684	
2033	52,929	118	12,730	11,056	319	51,453	20,618	
2034	51,059	119	12,846	10,836	332	55,391	19,511	
2035	49,066	120	12,917	10,583	343	59,415	18,354	
2036	46,955	121	12,937	10,298	354	63,521	17,152	
2037	44,734	121	12,911	9,981	364	67,603	15,947	
2038	42,413	121	12,833	9,634	374	71,641	14,750	
2039	40,002	121	12,705	9,259	383	75,610	13,553	
2040	37,519	120	12,527	8,858	390	79,466	12,362	
2041	34,979	119	12,297	8,434	397	83,172	11,188	
2042	32,404	117	12,014	7,989	402	86,665	10,048	
2043	29,816	115	11,679	7,529	407	89,923	8,950	
2044	27,241	112	11,290	7,057	411	92,927	7,902	
2045	24,703	108	10,850	6,579	414	95,652	6,906	
2046	22,225	104	10,360	6,099	415	98,086	5,968	
2047	19,830	99	9,824	5,621	415	100,149	5,113	
2048	17,539	94	9,247	5,150	414	101,783	4,353	
2049	15,372	88	8,634	4,690	411	103,033	3,680	
2050	13,345	81	7,993	4,245	406	103,914	3,089	
2051	11,470	74	7,332	3,819	399	104,415	2,575	
2052	9,759	67	6,660	3,414	391	104,554	2,134	
2053	8,215	60	5,986	3,033	382	104,340	1,755	
2054	6,843	53	5,321	2,677	371	103,791	1,431	
2055	5,640	46	4,676	2,348	358	102,925	1,154	
2056	4,597	40	4,058	2,047	344	101,759	920	
2057	3,707	34	3,477	1,772	328	100,298	725	
2058	2,957	28	2,940	1,525	312	98,551	564	
2059	2,335	23	2,453	1,305	295	96,538	434	
2060	1,826	19	2,018	1,109	277	94,281	328	
2061	1,414	15	1,636	937	258	91,808	243	
2062	1,085	12	1,307	788	240	89,139	174	
2063	827	9	1,029	659	222	86,294	122	
2064	628	7	798	548	204	83,293	83	
2065	477	6	609	455	186	80,158	55	
2066	364	4	458	376	169	76,913	34	
2067	280	3	340	311	153	73,577	20	
2068	219	2	249	256	137	70,166	10	
2069	175	2	180	212	123	66,691	5	
2070	143	1	129	175	109	63,165	2	

Table 1B
Projected Future Cash Flow for Current Participants

(Continued)

FY	(Dollars in Millions)							
	Benefits: Annuitants	CSRS Benefits: Separated Employees	Benefits: Active Employees	Normal Costs	Benefits: Annuitants	FERS Benefits: Separated Employees	Benefits: Active Employees	Normal Costs
2071	\$ 121	\$ 1	\$ 91	\$ 0	\$ 146	\$ 97	\$ 59,602	\$ 1
2072	105	1	64	0	122	85	56,015	0
2073	93	1	46	0	102	75	52,415	0
2074	85	1	33	0	87	65	48,814	0
2075	79	0	24	0	74	56	45,227	0
2076	75	0	18	0	64	49	41,672	0
2077	71	0	14	0	56	42	38,166	0
2078	68	0	12	0	49	36	34,732	0
2079	65	0	11	0	44	30	31,389	0
2080	61	0	11	0	39	26	28,161	0
2081	58	0	10	0	35	22	25,069	0
2082	55	0	10	0	32	18	22,136	0
2083	52	0	10	0	30	15	19,380	0
2084	49	0	9	0	27	13	16,814	0
2085	46	0	9	0	25	11	14,453	0
2086	43	0	9	0	23	9	12,304	0
2087	40	0	9	0	22	8	10,372	0
2088	37	0	8	0	20	7	8,655	0
2089	34	0	8	0	19	6	7,149	0
2090	32	0	8	0	17	5	5,844	0
2091	29	0	7	0	16	5	4,728	0
2092	27	0	7	0	15	5	3,787	0
2093	24	0	6	0	14	4	3,003	0
2094	22	0	6	0	13	4	2,359	0
2095	20	0	6	0	12	4	1,837	0
2096	18	0	5	0	11	4	1,419	0
2097	16	0	5	0	10	3	1,090	0
2098	15	0	5	0	9	3	835	0
2099	13	0	4	0	8	3	639	0
2100	12	0	4	0	7	3	491	0
2101	10	0	4	0	7	3	380	0
2102	9	0	3	0	6	3	298	0
2103	8	0	3	0	5	3	239	0
2104	7	0	3	0	5	3	197	0
2105	6	0	3	0	4	3	166	0
2106	5	0	2	0	4	2	144	0
2107	4	0	2	0	3	2	129	0
2108	3	0	2	0	3	2	117	0
2109	3	0	2	0	2	2	108	0
2110	2	0	1	0	2	2	101	0
2111	2	0	1	0	2	2	95	0
2112	1	0	1	0	2	2	90	0
2113	1	0	1	0	1	2	85	0
2114	1	0	1	0	1	2	80	0
2115	1	0	1	0	1	1	76	0

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, 2015 as shown in Table 1 reflect an overall actuarial gain of \$38.4 billion from that which would have been expected based on the prior year report. This consists of an actuarial gain of \$27.7 billion for CSRS and an actuarial gain of \$10.7 billion for FERS. The actuarial gain is due to experience that has varied from assumptions used for the prior report. The actuarial liabilities as of September 30, 2015 reflect actuarial assumptions that are unchanged from those used in the prior year report.

	Dollars in Billions		
	CSRS	FERS	Total
1. Actuarial Accrued Liability (9/30/2014)	\$1,094.0	\$568.9	\$1,662.9
Expense			
Normal Cost	4.2	30.6	34.8
Interest Expense	55.7	30.4	86.1
Loss(Gain) Due to Experience	(27.7)	(10.7)	(38.4)
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	32.2	50.3	82.5
3. Less: Amounts Paid	(69.8)	(12.7)	(82.5)
4. Actuarial Accrued Liability (9/30/2015)	1,056.4	606.5	1,662.9

Table 1D
Present Value of Future Benefits Obligations

The present value of future benefits and expenses shown in Table 1 is \$2,062.9 billion as of September 30, 2015 (consisting of \$1,072.7 billion for CSRS and \$990.2 billion for FERS). These benefits obligations for participants as of September 30, 2015 are projected to be met under existing statutory funding provisions as follows:

Present Values as of September 30, 2015	(dollars in billions)		
	CSRS	FERS	Total
PV Future Contributions from Employee & Employing Agency:	\$ 7.1	\$383.7	\$390.8
+ PV Fut. Excess Contrib. from Employing Agency for FERS-FRAE:	0.0	37.1	37.1
+ PV Future Treasury Amortization Payments (already established):	73.1	46.1	119.2
+ PV Future Treasury Amortization Payments (to be established):	6.2	245.4	251.6
+ PV Future Postal Service Amortization Pmts (already established):	0.0	3.9	3.9
+ PV Future Postal Service Amortization Pmts (to be established):	16.7	0.0	16.7
+ PV Future Treasury Payments of Interest on Static UAL:	315.4	0.0	315.4
+ PV Future Treasury Payments for Military Service costs:	54.9	0.0	54.9
PV Future Statutory Funding Payments:	\$473.4	\$716.2	\$1,189.6
+ Assets (at Par Value):	316.8	556.5	873.3
PV Total Amt Available under Statutory Funding Provisions:	\$790.2	\$1,272.7	\$2,062.9
+ PV Future Transfers to CSRS from Non-Postal FERS:	282.5	(282.5)	0.0
PV Future Benefits and Expenses:	\$1,072.7	\$990.2	\$2,062.9

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
2015	3.5	28.0	36.6	28.4	96.4	(81.7)	873.3	789.6	199.7

* 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)

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 FLOW									
2016	\$3.2	\$29.6	\$37.2	\$44.6	\$114.5	\$(82.7)	\$905.1	\$795.7	\$203.5
2017	3.5	30.5	38.0	46.2	118.2	(85.1)	938.2	800.9	209.6
2018	3.8	31.6	38.8	47.9	122.1	(88.1)	972.2	805.2	217.0
2019	4.2	32.7	39.4	49.6	125.9	(91.1)	1006.9	808.9	224.7
2020	4.6	33.7	40.0	51.4	129.7	(94.2)	1042.4	811.8	232.5
2021	5.0	34.8	40.5	53.2	133.5	(97.2)	1078.8	814.1	240.5
2022	5.4	35.9	40.9	55.1	137.4	(100.3)	1115.9	815.9	248.8
2023	5.9	37.0	41.4	57.0	141.4	(103.4)	1153.8	817.0	257.2
2024	6.4	38.1	42.2	59.0	145.7	(106.5)	1193.0	817.1	265.9
2025	7.0	39.3	42.9	61.0	150.2	(109.5)	1233.6	816.3	274.9
2026	7.5	40.4	43.8	63.1	154.9	(112.4)	1276.1	814.3	284.3
2027	8.1	41.6	44.6	65.3	159.6	(115.4)	1320.3	811.3	293.9
2028	8.8	42.8	45.4	67.6	164.6	(118.4)	1366.4	807.1	303.9
2029	9.4	44.1	46.0	70.0	169.5	(121.4)	1414.5	801.8	314.2
2030	10.1	45.4	46.5	72.5	174.5	(124.3)	1464.7	795.6	324.8
2035	13.7	52.5	48.6	86.9	201.7	(137.9)	1754.1	749.0	383.3
2040	17.9	60.7	50.1	105.5	234.2	(151.2)	2128.4	673.5	450.4
2045	22.4	70.5	46.5	129.5	268.9	(164.6)	2606.8	575.8	527.9
2050	27.1	82.2	45.7	159.9	315.0	(181.1)	3215.4	456.5	618.9
2055	32.2	96.2	40.4	198.2	367.0	(204.6)	3975.0	309.5	725.8
2060	37.9	104.3	29.5	242.5	414.3	(237.5)	4843.2	179.5	850.9
2065	44.5	122.3	20.2	290.7	477.7	(280.0)	5789.8	97.9	998.2
2070	52.3	143.6	11.7	344.2	551.8	(332.1)	6843.5	42.2	1172.0
2075	61.4	168.7	5.1	403.8	639.0	(393.8)	8016.8	12.1	1376.2
2080	72.1	198.1	1.2	470.3	741.6	(467.0)	9329.3	1.3	1615.4
2085	84.5	232.3	0.0	544.6	861.5	(554.5)	10798.3	0.0	1895.2
2090	99.2	272.5	0.0	627.4	999.1	(658.9)	12433.1	0.0	2223.2

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%
2015	1.8%	14.0%	18.3%	14.2%	48.3%	(40.9)%	437.3%	395.4%	100.0%

* 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 FLOW									
2016	1.6%	14.5%	18.3%	21.9%	56.3%	(40.6)%	444.9%	391.1%	100.0%
2017	1.7%	14.6%	18.1%	22.0%	56.4%	(40.6)%	447.6%	382.1%	100.0%
2018	1.7%	14.6%	17.9%	22.1%	56.2%	(40.6)%	447.9%	371.0%	100.0%
2019	1.9%	14.5%	17.5%	22.1%	56.0%	(40.6)%	448.2%	360.0%	100.0%
2020	2.0%	14.5%	17.2%	22.1%	55.8%	(40.5)%	448.4%	349.2%	100.0%
2021	2.1%	14.5%	16.8%	22.1%	55.5%	(40.4)%	448.5%	338.5%	100.0%
2022	2.2%	14.4%	16.5%	22.2%	55.2%	(40.3)%	448.6%	328.0%	100.0%
2023	2.3%	14.4%	16.1%	22.2%	55.0%	(40.2)%	448.6%	317.7%	100.0%
2024	2.4%	14.3%	15.9%	22.2%	54.8%	(40.1)%	448.7%	307.3%	100.0%
2025	2.5%	14.3%	15.6%	22.2%	54.6%	(39.8)%	448.7%	296.9%	100.0%
2026	2.7%	14.2%	15.4%	22.2%	54.5%	(39.6)%	448.8%	286.4%	100.0%
2027	2.8%	14.2%	15.2%	22.2%	54.3%	(39.3)%	449.2%	276.0%	100.0%
2028	2.9%	14.1%	14.9%	22.2%	54.2%	(39.0)%	449.6%	265.6%	100.0%
2029	3.0%	14.0%	14.7%	22.3%	54.0%	(38.6)%	450.2%	255.2%	100.0%
2030	3.1%	14.0%	14.3%	22.3%	53.7%	(38.3)%	451.0%	245.0%	100.0%
2035	3.6%	13.7%	12.7%	22.7%	52.6%	(36.0)%	457.6%	195.4%	100.0%
2040	4.0%	13.5%	11.1%	23.4%	52.0%	(33.6)%	472.5%	149.5%	100.0%
2045	4.2%	13.3%	8.8%	24.5%	50.9%	(31.2)%	493.8%	109.1%	100.0%
2050	4.4%	13.3%	7.4%	25.8%	50.9%	(29.3)%	519.5%	73.8%	100.0%
2055	4.4%	13.3%	5.6%	27.3%	50.6%	(28.2)%	547.7%	42.6%	100.0%
2060	4.5%	12.3%	3.5%	28.5%	48.7%	(27.9)%	569.2%	21.1%	100.0%
2065	4.5%	12.3%	2.0%	29.1%	47.9%	(28.1)%	580.0%	9.8%	100.0%
2070	4.5%	12.3%	1.0%	29.4%	47.1%	(28.3)%	583.9%	3.6%	100.0%
2075	4.5%	12.3%	0.4%	29.3%	46.4%	(28.6)%	582.5%	0.9%	100.0%
2080	4.5%	12.3%	0.1%	29.1%	45.9%	(28.9)%	577.5%	0.1%	100.0%
2085	4.5%	12.3%	0.0%	28.7%	45.5%	(29.3)%	569.8%	0.0%	100.0%
2090	4.5%	12.3%	0.0%	28.2%	44.9%	(29.6)%	559.2%	0.0%	100.0%

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

(Dollars in Billions)

Fiscal Year	Employee Contributions	Agency Contributions	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 FLOW													
1987	\$0.3	\$1.5	\$0.0	\$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	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	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	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	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	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	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	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	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	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	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	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	0.0	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	0.0	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	0.0	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	0.0	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	0.0	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	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	0.0	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	0.0	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	0.0	26.0	17.1	44.9	(9.7)	0.0	(9.7)	519.0	49.9	178.6
2015	2.1	27.1	3.6	0.0	30.7	16.0	48.8	(11.3)	(0.1)	(11.4)	556.5	50.0	184.9

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 Contributions	Agency Contributions	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
PROJECTED FLOW													
2016	\$2.4	\$28.8	\$3.2	\$0.5	\$32.6	\$29.7	\$64.7	\$(12.7)	\$(0.2)	\$(12.8)	\$608.4	\$48.9	\$190.8
2017	2.8	29.9	3.2	0.2	33.4	32.4	68.6	(14.5)	(0.3)	(14.7)	662.2	47.9	199.0
2018	3.2	31.1	3.2	0.2	34.5	35.2	73.0	(16.5)	(0.3)	(16.8)	718.4	47.0	208.0
2019	3.7	32.2	3.2	0.2	35.7	38.2	77.5	(18.7)	(0.4)	(19.1)	776.8	46.0	217.1
2020	4.2	33.4	3.2	0.2	36.9	41.2	82.2	(21.1)	(0.5)	(21.7)	837.4	44.9	226.1
2021	4.6	34.5	3.2	0.2	38.0	44.3	87.0	(23.7)	(0.7)	(24.4)	900.0	43.8	235.2
2022	5.2	35.7	3.2	0.2	39.1	47.6	91.9	(26.5)	(5.4)	(31.9)	960.0	47.2	244.3
2023	5.7	36.8	3.5	0.2	40.6	50.7	97.0	(29.5)	(25.3)	(54.9)	1002.1	70.4	253.5
2024	6.2	37.9	5.2	0.2	43.4	52.9	102.5	(32.7)	(26.2)	(58.9)	1045.7	93.8	262.9
2025	6.8	39.1	6.9	0.2	46.2	55.1	108.2	(35.9)	(26.9)	(62.9)	1091.1	117.4	272.5
2026	7.4	40.3	8.6	0.2	49.1	57.5	114.0	(39.2)	(27.5)	(66.7)	1138.4	140.9	282.3
2027	8.0	41.5	10.3	0.2	52.1	59.9	120.1	(42.8)	(28.0)	(70.8)	1187.7	164.3	292.4
2028	8.7	42.8	12.1	0.2	55.1	62.4	126.3	(46.5)	(28.4)	(74.8)	1239.1	187.4	302.7
2029	9.3	44.0	13.9	0.2	58.2	65.1	132.6	(50.3)	(28.8)	(79.1)	1292.7	210.1	313.2
2030	10.0	45.4	15.7	0.2	61.3	67.8	139.2	(54.3)	(29.2)	(83.5)	1348.4	232.5	324.1
2035	13.7	52.5	24.9	0.2	77.6	83.5	174.9	(75.8)	(29.6)	(105.3)	1666.5	333.5	383.2
2040	17.9	60.7	33.4	0.2	94.3	103.3	215.5	(101.0)	(26.4)	(127.4)	2067.8	400.4	450.4
2045	22.4	70.5	36.8	0.0	107.3	128.1	257.8	(129.0)	(19.8)	(148.7)	2569.8	420.5	527.9
2050	27.1	82.2	40.6	0.0	122.9	159.2	309.2	(159.6)	(12.5)	(172.1)	3197.6	381.4	618.9
2055	32.2	96.2	38.2	0.0	134.4	197.8	364.4	(194.2)	(7.0)	(201.3)	3967.3	280.8	725.8
2060	37.9	104.3	29.3	0.0	133.6	241.9	413.4	(233.6)	0.0	(233.6)	4832.3	178.9	850.9
2065	44.5	122.3	20.2	0.0	142.5	290.5	477.5	(279.0)	0.0	(279.0)	5786.7	97.7	998.2
2070	52.3	143.6	11.7	0.0	155.3	344.2	551.7	(331.8)	0.0	(331.8)	6842.3	42.1	1172.0
2075	61.4	168.7	5.1	0.0	173.8	403.7	638.9	(393.7)	0.0	(393.7)	8016.0	12.0	1376.2
2080	72.1	198.1	1.2	0.0	199.2	470.2	741.5	(467.0)	0.0	(467.0)	9328.7	1.2	1615.4
2085	84.5	232.3	0.0	0.0	232.3	544.6	861.5	(554.5)	0.0	(554.5)	10797.9	0.0	1895.2
2090	99.2	272.5	0.0	0.0	272.5	627.4	999.1	(658.8)	0.0	(658.8)	12432.8	0.0	2223.2

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

[Percentage of Total Payroll (CSRS & FERS)]

Fiscal Year	Employee Contributions	Agency Contributions	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 FLOW													
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%
2015	1.1%	13.6%	1.8%	0.0%	15.4%	8.0%	24.4%	(5.7)%	(0.1)%	(5.7)%	278.7%	25.0%	92.6%

** 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 Contributions	Agency Contributions	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
PROJECTED FLOW													
2016	1.2%	14.2%	1.6%	0.2%	16.0%	14.6%	31.8%	(6.2)%	(0.1)%	(6.3)%	299.0%	24.0%	93.8%
2017	1.3%	14.3%	1.5%	0.1%	15.9%	15.5%	32.7%	(6.9)%	(0.1)%	(7.0)%	315.9%	22.9%	94.9%
2018	1.5%	14.3%	1.5%	0.1%	15.9%	16.2%	33.6%	(7.6)%	(0.2)%	(7.7)%	331.0%	21.6%	95.8%
2019	1.6%	14.3%	1.4%	0.1%	15.9%	17.0%	34.5%	(8.3)%	(0.2)%	(8.5)%	345.8%	20.5%	96.6%
2020	1.8%	14.4%	1.4%	0.1%	15.9%	17.7%	35.4%	(9.1)%	(0.2)%	(9.3)%	360.2%	19.3%	97.3%
2021	1.9%	14.4%	1.3%	0.1%	15.8%	18.4%	36.2%	(9.9)%	(0.3)%	(10.1)%	374.2%	18.2%	97.8%
2022	2.1%	14.3%	1.3%	0.1%	15.7%	19.1%	36.9%	(10.7)%	(2.2)%	(12.8)%	385.9%	19.0%	98.2%
2023	2.2%	14.3%	1.4%	0.1%	15.8%	19.7%	37.7%	(11.5)%	(9.8)%	(21.3)%	389.6%	27.4%	98.6%
2024	2.3%	14.3%	1.9%	0.1%	16.3%	19.9%	38.5%	(12.3)%	(9.8)%	(22.1)%	393.3%	35.3%	98.9%
2025	2.5%	14.2%	2.5%	0.1%	16.8%	20.1%	39.3%	(13.1)%	(9.8)%	(22.9)%	396.9%	42.7%	99.1%
2026	2.6%	14.2%	3.0%	0.1%	17.3%	20.2%	40.1%	(13.8)%	(9.7)%	(23.5)%	400.4%	49.6%	99.3%
2027	2.7%	14.1%	3.5%	0.1%	17.7%	20.4%	40.8%	(14.5)%	(9.5)%	(24.1)%	404.1%	55.9%	99.5%
2028	2.9%	14.1%	4.0%	0.1%	18.1%	20.5%	41.5%	(15.3)%	(9.3)%	(24.6)%	407.8%	61.7%	99.6%
2029	3.0%	14.0%	4.4%	0.1%	18.5%	20.7%	42.2%	(16.0)%	(9.2)%	(25.2)%	411.5%	66.9%	99.7%
2030	3.1%	14.0%	4.8%	0.1%	18.9%	20.9%	42.9%	(16.7)%	(9.0)%	(25.7)%	415.1%	71.6%	99.8%
2035	3.6%	13.7%	6.5%	0.1%	20.2%	21.8%	45.6%	(19.8)%	(7.7)%	(27.5)%	434.7%	87.0%	100.0%
2040	4.0%	13.5%	7.4%	0.1%	20.9%	22.9%	47.8%	(22.4)%	(5.9)%	(28.3)%	459.1%	88.9%	100.0%
2045	4.2%	13.3%	7.0%	0.0%	20.3%	24.3%	48.8%	(24.4)%	(3.7)%	(28.2)%	486.8%	79.7%	100.0%
2050	4.4%	13.3%	6.6%	0.0%	19.9%	25.7%	50.0%	(25.8)%	(2.0)%	(27.8)%	516.6%	61.6%	100.0%
2055	4.4%	13.3%	5.3%	0.0%	18.5%	27.3%	50.2%	(26.8)%	(1.0)%	(27.7)%	546.6%	38.7%	100.0%
2060	4.5%	12.3%	3.4%	0.0%	15.7%	28.4%	48.6%	(27.5)%	0.0%	(27.5)%	567.9%	21.0%	100.0%
2065	4.5%	12.3%	2.0%	0.0%	14.3%	29.1%	47.8%	(27.9)%	0.0%	(27.9)%	579.7%	9.8%	100.0%
2070	4.5%	12.3%	1.0%	0.0%	13.3%	29.4%	47.1%	(28.3)%	0.0%	(28.3)%	583.8%	3.6%	100.0%
2075	4.5%	12.3%	0.4%	0.0%	12.6%	29.3%	46.4%	(28.6)%	0.0%	(28.6)%	582.5%	0.9%	100.0%
2080	4.5%	12.3%	0.1%	0.0%	12.3%	29.1%	45.9%	(28.9)%	0.0%	(28.9)%	577.5%	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%	44.9%	(29.6)%	0.0%	(29.6)%	559.2%	0.0%	100.0%

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

(Dollars in Billions)

Fiscal Year	Employee Contributions	Agency Contributions	Treasury 30 Year Payment	Postal Amort. Payment	Interest Payment on UAL	Military Service Payment	Total Government Contrib.	Transfer from (to) FERS	Investment 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
2015	1.3	0.9	8.5	0.0	20.6	3.8	33.9	0.1	12.3	47.6	(70.4)	316.8	739.6	14.8

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 Contributions	Agency Contributions	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
PROJECTED FLOW														
2016	\$0.8	\$0.7	\$8.5	\$0.0	\$21.3	\$3.7	\$34.2	\$0.2	\$14.9	\$50.0	\$(70.0)	\$296.8	\$746.9	\$12.7
2017	0.7	0.6	8.4	1.2	21.2	3.7	35.2	0.3	13.8	49.9	(70.7)	276.0	753.0	10.7
2018	0.6	0.5	8.3	1.2	22.1	3.8	35.8	0.3	12.7	49.4	(71.7)	253.7	758.3	9.0
2019	0.5	0.4	8.0	1.2	22.9	3.8	36.4	0.4	11.5	48.8	(72.4)	230.0	762.9	7.6
2020	0.4	0.4	7.8	1.2	23.7	3.8	36.9	0.5	10.2	48.0	(73.0)	205.0	766.9	6.4
2021	0.3	0.3	7.4	1.2	24.5	3.9	37.3	0.7	8.9	47.2	(73.5)	178.8	770.4	5.3
2022	0.3	0.3	7.1	1.2	25.3	3.9	37.7	5.4	7.5	50.9	(73.8)	155.9	768.7	4.4
2023	0.2	0.2	6.7	1.2	25.8	3.9	37.8	25.3	6.3	69.7	(73.9)	151.7	746.6	3.6
2024	0.2	0.2	6.3	1.2	25.4	3.9	36.9	26.2	6.1	69.4	(73.8)	147.3	723.3	3.0
2025	0.1	0.1	5.9	1.2	24.8	3.9	36.0	26.9	5.9	68.9	(73.6)	142.6	698.9	2.4
2026	0.1	0.1	5.7	1.2	24.3	3.8	35.1	27.5	5.6	68.3	(73.2)	137.7	673.4	2.0
2027	0.1	0.1	5.3	1.2	23.6	3.8	34.1	28.0	5.4	67.6	(72.7)	132.6	647.0	1.6
2028	0.1	0.1	5.0	1.2	23.0	3.8	33.1	28.4	5.1	66.7	(72.0)	127.3	619.7	1.2
2029	0.1	0.1	4.7	1.2	22.2	3.7	31.9	28.8	4.9	65.6	(71.1)	121.9	591.7	1.0
2030	0.0	0.0	4.2	1.2	21.5	3.7	30.6	29.2	4.6	64.5	(70.0)	116.3	563.1	0.7
2035	0.0	0.0	2.0	1.2	17.0	3.3	23.4	29.6	3.4	56.4	(62.1)	87.6	415.5	0.1
2040	0.0	0.0	0.7	1.2	11.9	2.6	16.4	26.4	2.2	45.1	(50.2)	60.5	273.1	0.0
2045	0.0	0.0	0.6	0.0	7.3	1.9	9.7	19.8	1.4	30.9	(35.7)	37.0	155.3	0.0
2050	0.0	0.0	0.2	0.0	3.7	1.1	5.1	12.5	0.7	18.3	(21.4)	17.8	75.1	0.0
2055	0.0	0.0	0.1	0.0	1.6	0.5	2.2	7.0	0.4	9.6	(10.4)	7.7	28.7	0.0
2060	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.0	0.6	0.8	(3.9)	10.9	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)	3.1	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)	1.2	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

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

[Percentage of Total Payroll (CSRS & FERS)]														
Fiscal Year	Employee Contributions	Agency Contributions	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 FLOW														
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%
2015	0.7%	0.5%	4.3%	0.0%	10.3%	1.9%	17.0%	0.1%	6.2%	23.8%	(35.3)%	158.6%	370.4%	7.4%

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

[Percentage of Total Payroll (CSRS & FERS)]														
Fiscal Year	Employee Contributions	Agency Contributions	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
PROJECTED FLOW														
2016	0.4%	0.4%	4.2%	0.0%	10.4%	1.8%	16.8%	0.1%	7.3%	24.6%	(34.4)%	145.9%	367.1%	6.2%
2017	0.3%	0.3%	4.0%	0.6%	10.1%	1.8%	16.8%	0.1%	6.6%	23.8%	(33.7)%	131.6%	359.2%	5.1%
2018	0.3%	0.2%	3.8%	0.6%	10.2%	1.7%	16.5%	0.2%	5.8%	22.8%	(33.0)%	116.9%	349.4%	4.2%
2019	0.2%	0.2%	3.6%	0.5%	10.2%	1.7%	16.2%	0.2%	5.1%	21.7%	(32.2)%	102.4%	339.6%	3.4%
2020	0.2%	0.2%	3.3%	0.5%	10.2%	1.7%	15.9%	0.2%	4.4%	20.7%	(31.4)%	88.2%	329.9%	2.7%
2021	0.1%	0.1%	3.1%	0.5%	10.2%	1.6%	15.5%	0.3%	3.7%	19.6%	(30.5)%	74.3%	320.3%	2.2%
2022	0.1%	0.1%	2.8%	0.5%	10.2%	1.6%	15.2%	2.2%	3.0%	20.5%	(29.7)%	62.7%	309.0%	1.8%
2023	0.1%	0.1%	2.6%	0.5%	10.0%	1.5%	14.7%	9.8%	2.5%	27.1%	(28.7)%	59.0%	290.3%	1.4%
2024	0.1%	0.1%	2.4%	0.5%	9.5%	1.5%	13.9%	9.8%	2.3%	26.1%	(27.8)%	55.4%	272.1%	1.1%
2025	0.1%	0.1%	2.1%	0.4%	9.0%	1.4%	13.1%	9.8%	2.1%	25.1%	(26.8)%	51.9%	254.2%	0.9%
2026	0.0%	0.0%	2.0%	0.4%	8.5%	1.4%	12.3%	9.7%	2.0%	24.0%	(25.8)%	48.4%	236.9%	0.7%
2027	0.0%	0.0%	1.8%	0.4%	8.0%	1.3%	11.6%	9.5%	1.8%	23.0%	(24.7)%	45.1%	220.1%	0.5%
2028	0.0%	0.0%	1.7%	0.4%	7.6%	1.2%	10.9%	9.3%	1.7%	21.9%	(23.7)%	41.9%	203.9%	0.4%
2029	0.0%	0.0%	1.5%	0.4%	7.1%	1.2%	10.2%	9.2%	1.6%	20.9%	(22.6)%	38.8%	188.3%	0.3%
2030	0.0%	0.0%	1.3%	0.4%	6.6%	1.1%	9.4%	9.0%	1.4%	19.8%	(21.6)%	35.8%	173.4%	0.2%
2035	0.0%	0.0%	0.5%	0.3%	4.4%	0.9%	6.1%	7.7%	0.9%	14.7%	(16.2)%	22.9%	108.4%	0.0%
2040	0.0%	0.0%	0.1%	0.3%	2.6%	0.6%	3.7%	5.9%	0.5%	10.0%	(11.1)%	13.4%	60.6%	0.0%
2045	0.0%	0.0%	0.1%	0.0%	1.4%	0.4%	1.8%	3.7%	0.3%	5.8%	(6.8)%	7.0%	29.4%	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%	12.1%	0.0%
2055	0.0%	0.0%	0.0%	0.0%	0.2%	0.1%	0.3%	1.0%	0.0%	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, 2015.

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 past Postal Amortized Payments shown in Table 2 and 3 reflect actual payments made by the United States Postal Service and do not reflect unpaid, scheduled amortized amounts for FY 2014 and FY 2015. The projected Postal Amortized Payments shown in Table 2 and 3 assume payment in FY 2016 of all unpaid, previously scheduled amortized amounts.

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 2015. 0.00%	Jan 2016. 1.30%	Jun 2016. 5.25%
<i>Future Years: 3.00%</i>	<i>Future Years: 3.25%</i>	<i>Future Years: 5.25%</i>

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

Recommend Date	Effective for Valuation Dates	Long Term Economic Assumptions			<u>Normal Cost Percentage</u>			
		Inflation	Interest	Salary Growth	CSRS	FERS	FERS-RAE	FERS-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, 2015

Employees	Non-Postal	Postal	Total	Avg Age	Avg Service
CSRS	118,000	41,000	159,000	60.7	35.6
FERS	2,076,000	453,000	2,529,000	47.2	13.0
Total	2,194,000	494,000	2,688,000	48.0	14.3

CSRS Active Employees
Number* as of September 30, 2015

Age Nearest Birthday	Closest Whole Years of Service							Total
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
<45	0	0	0	0	0	0	0	0
45 - 49	0	0	2	3	1	9	25	41
50 - 54	29	50	108	195	310	463	15,289	16,443
55 - 59	91	178	326	627	1,002	1,335	52,359	55,918
60 - 64	114	229	395	710	913	1,280	49,228	52,870
65 - 69	55	91	163	325	459	483	22,908	24,484
70 - 74	12	34	44	65	96	102	6,279	6,634
75+	4	9	8	15	17	38	2,520	2,610
CSRS Total	306	591	1,047	1,941	2,798	3,710	148,607	159,000

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

Average Salary as of September 30, 2015

Age Nearest Birthday	Closest Whole Years of Service							Total
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	
<45	--	--	--	--	--	--	--	--
45 - 49	--	--	\$63,763	\$48,488	\$101,145	\$86,715	\$89,894	\$84,763
50 - 54	\$74,046	\$80,517	76,917	73,531	78,348	82,469	90,833	90,005
55 - 59	79,041	79,496	76,845	78,543	79,993	83,487	88,641	88,136
60 - 64	77,478	79,705	81,298	80,466	81,221	81,512	85,009	84,730
65 - 69	109,665	87,855	88,955	92,075	89,684	86,889	87,317	87,479
70 - 74	111,712	121,705	97,089	106,404	96,061	98,861	92,340	92,851
75+	67,719	150,452	102,878	118,443	96,002	129,244	94,974	95,779
CSRS	\$84,677	\$84,453	\$81,438	\$82,216	\$82,457	\$84,015	\$87,723	\$87,417

Table 6
Employee Population Data

FERS Active Employees
Number* as of September 30, 2015

Closest Whole Years of Service								
Age Nearest Birthday	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total
15 - 19	343	0	0	0	0	0	0	343
20 - 24	24,925	783	0	0	0	0	0	25,708
25 - 29	85,308	37,241	1,222	0	0	0	0	123,772
30 - 34	99,733	113,779	31,855	1,335	0	0	0	246,702
35 - 39	76,017	104,235	79,220	24,306	817	0	0	284,596
40 - 44	60,810	79,152	72,059	59,384	20,573	2,782	0	294,760
45 - 49	61,090	81,542	65,669	66,588	56,838	44,099	3,851	379,677
50 - 54	50,895	84,915	69,432	57,224	53,507	97,561	46,861	460,396
55 - 59	34,998	63,799	61,294	51,372	41,395	73,939	60,704	387,500
60 - 64	17,762	37,662	36,869	34,334	27,273	39,847	33,709	227,455
65 - 69	5,253	13,350	13,264	11,856	10,143	12,831	11,215	77,912
70 - 74	1,173	2,470	2,639	2,458	2,054	2,658	2,191	15,642
75+	311	654	702	675	605	844	746	4,538
FERS Total	518,618	619,582	434,226	309,531	213,207	274,559	159,277	2,529,000

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

Average Salary as of September 30, 2015

Closest Whole Years of Service								
Age Nearest Birthday	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30+	Total
15 - 19	\$30,097	--	--	--	--	--	--	\$30,097
20 - 24	41,560	\$44,281	--	--	--	--	--	41,643
25 - 29	50,273	63,741	\$59,283	--	--	--	--	54,414
30 - 34	58,877	71,507	73,179	\$72,379	--	--	--	66,622
35 - 39	65,414	75,313	79,601	78,218	\$80,802	--	--	74,126
40 - 44	65,365	77,593	80,465	80,863	81,233	\$87,867	--	76,782
45 - 49	65,259	75,603	79,469	81,480	86,444	89,204	\$89,195	78,979
50 - 54	67,306	76,383	77,659	79,340	84,003	89,443	87,820	80,757
55 - 59	68,902	77,220	77,769	77,119	81,374	83,298	85,261	79,406
60 - 64	73,529	79,345	79,426	77,677	80,538	83,044	84,259	80,171
65 - 69	82,978	82,718	81,400	81,548	83,524	84,751	87,757	83,498
70 - 74	93,840	91,968	85,309	86,269	88,407	88,459	92,330	89,076
75+	97,948	102,166	90,182	87,337	94,944	90,847	93,713	93,359
FERS	\$61,433	\$75,051	\$78,719	\$79,578	\$83,471	\$86,581	\$86,210	\$76,107

Table 7 Demographic Assumptions

MALE

Normal Retirement Rates-CSRS

Age (ANB)	Service						
	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 (ANB)	Service						
	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

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

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

SERVICE	Age Nearest Birthday					
	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 (ANB)	Amount Prior Service (Years)				
	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 (ANB)	Amount Prior Service (Years)				
	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	-	-	-

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

Table 7

Demographic Assumptions

MALE

Withdrawal Rates (Offset for Re-entry)

SERVICE	Age Nearest Birthday					
	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

Table 7
Demographic Assumptions

MALE

Death Rate Age	Fiscal Year							Annual Improvement
	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	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

Table 7
Demographic Assumptions

MALE

Death Rate w/ Survivor	Fiscal Year							Annual Improvement
	2014	2015	2016	2017	2018	2019	2020	
Age								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	0.00023	0.00023	0.00023	0.010
33	0.00023	0.00023	0.00022	0.00022	0.00022	0.00021	0.00021	0.010
34	0.00024	0.00023	0.00023	0.00023	0.00022	0.00022	0.00022	0.010
35	0.00028	0.00028	0.00027	0.00027	0.00027	0.00026	0.00026	0.010
36	0.00035	0.00034	0.00034	0.00033	0.00033	0.00032	0.00032	0.010
37	0.00037	0.00037	0.00036	0.00035	0.00035	0.00034	0.00034	0.010
38	0.00037	0.00036	0.00036	0.00035	0.00035	0.00034	0.00034	0.010
39	0.00038	0.00037	0.00036	0.00036	0.00035	0.00035	0.00034	0.010
40	0.00041	0.00040	0.00039	0.00039	0.00038	0.00038	0.00037	0.010
41	0.00047	0.00046	0.00045	0.00044	0.00044	0.00043	0.00043	0.010
42	0.00052	0.00051	0.00050	0.00050	0.00049	0.00048	0.00048	0.010
43	0.00055	0.00054	0.00054	0.00053	0.00052	0.00051	0.00051	0.010
44	0.00057	0.00056	0.00055	0.00054	0.00054	0.00053	0.00052	0.010
45	0.00059	0.00058	0.00057	0.00056	0.00055	0.00055	0.00054	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

MALE

Age	Non-Disability Annuitant Death Rate						Death Rate for Spouse Survivor of Male									Annual Improvement
							Duration 3+						Duration 1	Duration 2		
	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

MALE

Age	Non-Disability Annuitant Death Rate						Death Rate for Spouse Survivor of Male						Annual Improvement		
							Duration 3+						Duration 1	Duration 2	2021+
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2020	2020	
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

MALE

Age	Disability Retirement Rate	Death Rate Disabled			Non-Death Term of Disability			Survivor Spouse Remarriage			Fraction of Ann. w/ a Reduced Benefit	
		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

MALE

Age	Disability Retirement Rate	Death Rate Disabled			Non-Death Term of Disability			Survivor Spouse Remarriage			Fraction of Ann. w/ a Reduced Benefit	
		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

Table 7 Demographic Assumptions

FEMALE

Normal Retirement Rates-CSRS

Age (ANB)	Service						
	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

Age (ANB)	Service						
	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

Involuntary Retirement

Age	CSRS	FERS
42	0.0167	0.0073
43	0.0167	0.0073
44	0.0167	0.0073
45	0.0150	0.0083
46	0.0147	0.0093
47	0.0157	0.0104
48	0.0178	0.0104
49	0.0208	0.0118
50	0.0244	0.0122
51	0.0285	0.0126
52	0.0329	0.0127
53	0.0372	0.0148
54	0.0415	0.0189
55	0.0453	0.0221
56	0.0486	0.0241
57	0.0511	0.0234
58	0.0526	0.0244
59+	0.0530	0.0244

MRA+10 Retirement

Age	FERS
55	0.0178
56	0.0174
57	0.0155
58	0.0157
59	0.0182
60	0.0418
61	0.0586

Merit/Longevity Salary Increases

SERVICE	Age Nearest Birthday					
	17-24	25-29	30-34	35-44	45-54	55+
0	0.085	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	0.069	0.0553	0.0438	0.0387	0.0331
4	0.0657	0.0627	0.0541	0.0446	0.039	0.0327
5	0.0645	0.0499	0.0421	0.0334	0.0299	0.0277
6	0.0688	0.0465	0.038	0.0296	0.0263	0.0247
7	0.0761	0.0445	0.0359	0.0284	0.0244	0.0224
8	0	0.0448	0.0334	0.0252	0.0216	0.0197
9	0	0.0471	0.0341	0.0266	0.0219	0.0188
10	0	0.0482	0.0325	0.0237	0.0186	0.0161
11	0	0.0515	0.0321	0.0222	0.0168	0.0146
12	0	0.0552	0.0325	0.0217	0.0163	0.0145
13	0	0	0.0323	0.0197	0.0147	0.0127
14	0	0	0.0335	0.0189	0.0132	0.0116
15	0	0	0.0349	0.0186	0.0126	0.0107
16	0	0	0.0376	0.0193	0.0131	0.0111
17	0	0	0.0393	0.0189	0.0127	0.0106
18	0	0	0	0.0184	0.0119	0.0097
19	0	0	0	0.0186	0.0125	0.0099
20+	0	0	0	0.0177	0.0112	0.0075

Assumed Distribution of New Entrants

Age (ANB)	Amount Prior Service (Years)				
	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

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

Age (ANB)	Amount Prior Service (Years)				
	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.

Table 7 Demographic Assumptions

FEMALE

Withdrawal Rates (Offset for Re-entry)

SERVICE	Age Nearest Birthday					
	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

Table 7
Demographic Assumptions

FEMALE

Death Rate Age	Fiscal Year							Annual Improvement 2021+
	2014	2015	2016	2017	2018	2019	2020	
17	0.00016	0.00016	0.00015	0.00015	0.00015	0.00015	0.00015	0.010
18	0.00014	0.00014	0.00014	0.00013	0.00013	0.00013	0.00013	0.010
19	0.00013	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.010
20	0.00013	0.00013	0.00013	0.00013	0.00013	0.00012	0.00012	0.010
21	0.00014	0.00014	0.00014	0.00013	0.00013	0.00013	0.00013	0.010
22	0.00015	0.00015	0.00015	0.00015	0.00015	0.00014	0.00014	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	0.00112	0.00111	0.00110	0.00108	0.00107	0.00106	0.00105	0.010
50	0.00119	0.00118	0.00117	0.00116	0.00115	0.00113	0.00112	0.010
51	0.00126	0.00125	0.00123	0.00122	0.00121	0.00120	0.00118	0.010
52	0.00132	0.00131	0.00129	0.00128	0.00126	0.00125	0.00124	0.010
53	0.00140	0.00138	0.00137	0.00135	0.00134	0.00132	0.00131	0.010
54	0.00148	0.00146	0.00144	0.00142	0.00141	0.00139	0.00138	0.010
55	0.00150	0.00148	0.00146	0.00144	0.00143	0.00141	0.00140	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

Table 7
Demographic Assumptions

FEMALE

Death Rate w/ Survivor	Fiscal Year							Annual Improvement
	2014	2015	2016	2017	2018	2019	2020	
Age								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

FEMALE

Age	Non-Disability Annuitant Death Rate						Death Rate for Spouse Survivors of Females								Annual Improvement
	Fiscal Year						Duration 3+						Duration 1	Duration 2	
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2020	2020	
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

FEMALE

Age	Non-Disability Annuitant Death Rate						Death Rate for Spouse Survivors of Females								Annual Improvement
	Fiscal Year						Duration 3+					Duration 1	Duration 2		
	2015	2016	2017	2018	2019	2020	2015	2016	2017	2018	2019	2020	2020	2020	
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

FEMALE

Age	Disability Retirement Rate	Death Rate Disabled			Non-Death Term of Disability			Survivor Spouse Remarriage			Fraction of Ann. w/ a Reduced Benefit	
		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	0.00040	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	0.00048	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	0.00145	0.00782	0.01138	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	0.00677	0.00200	0.00790	0.01071	0.05038	0.11094	0.07017	0.35712	0.30247
39	0.00216	0.01203	0.01027	0.00736	0.00233	0.00914	0.00869	0.03837	0.09717	0.05342	0.35804	0.30247
40	0.00241	0.01293	0.01085	0.00647	0.00313	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	0.00315	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	0.01738	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

FEMALE

Age	Disability Retirement Rate	Death Rate Disabled			Non-Death Term of Disability			Survivor Spouse Remarriage			Fraction of Ann. w/ a Reduced Benefit	
		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

**Table 8
Plan Provisions**

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: <table align="center"> <tr> <td><u>CPI</u></td> <td><u>COLA</u></td> </tr> <tr> <td>0 to 2%</td> <td>CPI</td> </tr> <tr> <td>2 to 3%</td> <td>2%</td> </tr> <tr> <td>3% or more</td> <td>CPI minus 1%</td> </tr> </table>	<u>CPI</u>	<u>COLA</u>	0 to 2%	CPI	2 to 3%	2%	3% or more	CPI minus 1%
<u>CPI</u>	<u>COLA</u>									
0 to 2%	CPI									
2 to 3%	2%									
3% or more	CPI minus 1%									

Table 8
Plan Provisions

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	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: Not Applicable	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: (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)	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: 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.

Table 8
Plan Provisions

DISABILITY BENEFITS

CSRS Basic Benefit

FERS Basic Benefit

QUALIFICATIONS	<p>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.</p>	<p>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.</p>
AMOUNT OF BENEFITS	<p>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.</p>	<p>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.</p> <p>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.</p> <p>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.</p>

Table 8
Plan Provisions

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 2016 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 after leaving Federal service but before annuity payments begin	Refund of the deceased's retirement contributions only; no other benefits.	With less than 10 years of service, refund of contributions; 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.

Table 8
Plan Provisions

	CSRS Basic Benefit	FERS Basic Benefit
ANNUITY REDUCTION TO COVER SURVIVOR BENEFITS	<p>A retiree's annuity will be reduced as follows to provide for a survivor benefit:</p> <p>First \$3,600 reduced 2.5%;</p> <p>Amounts over \$3,600 reduced 10%.</p> <p>Note: The 55% spouse's benefit is based on the amount of the annuity before this reduction is taken.</p>	<p>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.</p> <p>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.</p>

**MINIMUM RETIREMENT AGE (MRA)
FOR FERS BASIC BENEFIT**

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