Office of Inspector General | United States Postal Service

Audit Report

Options to Reduce Unfunded Retirement Liabilities

Report Number 19BG010FT000-R20 | March 6, 2020

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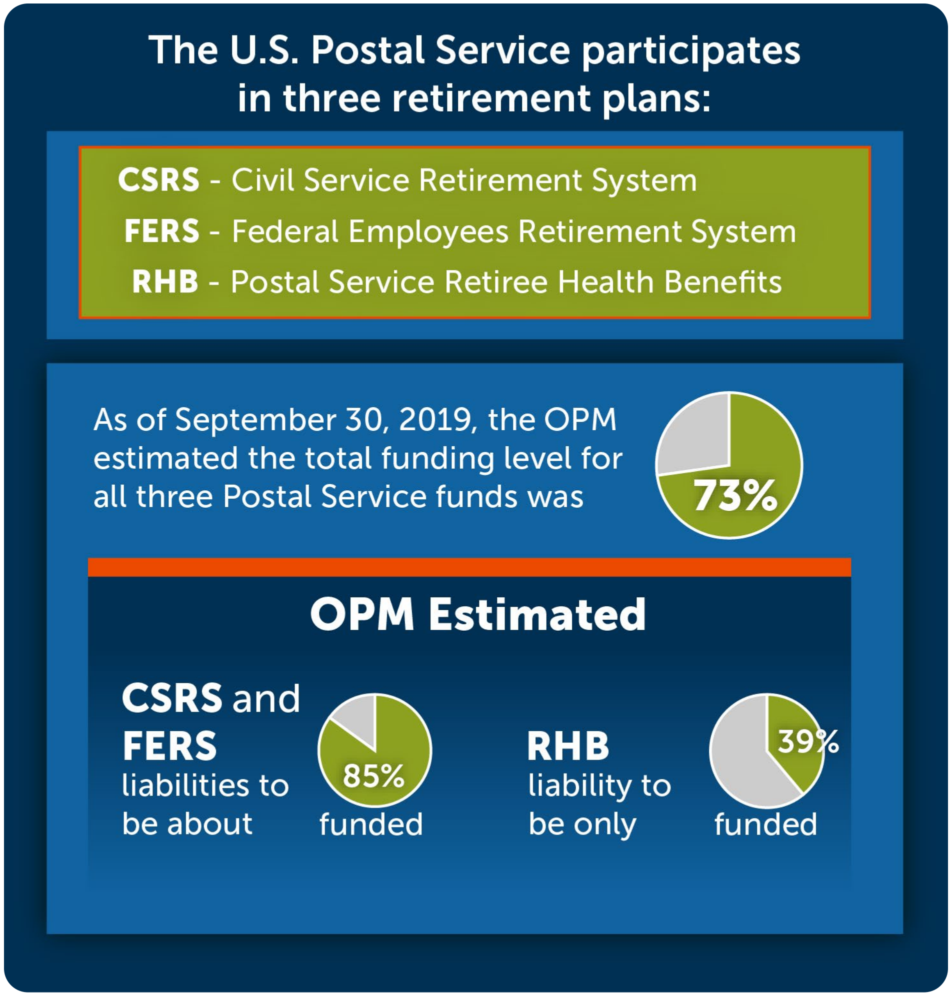
Highlights

Objective

The U.S. Postal Service participates in three retirement plans: the Civil Service Retirement System (CSRS), the Federal Employees Retirement System (FERS), and the Postal Service Retiree Health Benefits (RHB). The first two are pension plans and the third is set up to fund the Postal Service's share of RHB premiums.



The U.S. Office of Personnel Management (OPM) administers these programs, including measurement of liabilities. Calculations of the CSRS, FERS, and RHB liabilities exhibit varying degrees of sensitivity to certain economic and demographic assumptions that are subject to change.

In conjunction with the U.S. Department of the Treasury (Treasury), the OPM manages the Postal Service's retirement investments. The assets of the CSRS and FERS plans are held in one fund in the Treasury, and RHB assets reside in a separate fund. Under current law, assets of these plans are restricted to government trust funds invested solely in fixed-rate U.S. Treasury securities or other government-guaranteed securities, which are often regarded as riskless in the sense that there is virtually no possibility of loss of principal. However, the trade-off for this safety is a low rate of return that carries the risk of not generating adequate investment income to meet all the future obligations of the funds.

As of September 30, 2019, the OPM estimated the total funding level for all three Postal Service funds was 73 percent, with all three funds unfunded to varying degrees. The OPM estimated the CSRS and the FERS liabilities to be about 85 percent funded, and the RHB liability to be only 39 percent funded.

There are a number of options, some of which have been in past proposed legislation or are under current legislative consideration, to address these funding shortfalls, such as:

- Implement full participation of beneficiaries in Medicare Parts A, B, and D (Medicare integration) to reduce the RHB liability.
- Calculate the RHB liability based on the number of employees currently eligible for RHB (vested).
- Reduce required retirement liability funding levels below 100 percent.
- Recalculate the RHB liability based on potential changes in actuarial assumptions (for example, life expectancy).
- Generate higher returns on CSRS, FERS, and RHB assets.

Our objective was to explore the last two of these options to address reducing unfunded retirement liabilities. First, we evaluated potential changes to life expectancy (mortality-improvement) assumptions used to calculate the RHB liability. Next, our investment consultant determined the potential impact of investing Postal Service retirement contributions (and employee contributions to CSRS and FERS) in six different sample portfolios of diversified assets, beginning in fiscal year 2020. Retirement assets held in Treasury as of the end of fiscal year 2019 would remain in Treasury, earning interest and funding pension payments and RHB premiums, until balances reach zero.

"Our objective was to explore the last two of these options to address reducing unfunded retirement liabilities."

Findings

After a century of generally rapid mortality improvement, there has been virtually no improvement this decade. In recent years, actuaries' projections (for small improvements) have failed to materialize. Changing the mortality-improvement assumptions used by the OPM to calculate the RHB liability, to better reflect developments post-2010, could reduce the Postal Service's unfunded RHB liability by about $4.2 billion. This change would be independent of other changes, such as Medicare integration or calculating only the vested RHB liability for funding purposes.

In addition, by investing future employee and Postal Service retirement contributions in diversified portfolios of stocks, bonds, and other assets, the unfunded Postal Service pension and RHB liabilities could effectively be reduced by increasing returns on its three retirement funds. Based on projected payments into CSRS, FERS, and RHB, comparing six diversified portfolios against the current investment strategy, we found that each of the six would likely improve funding levels over 20 years.

Recommendation

We recommended management work with the OPM to update the mortality improvement assumptions it uses to calculate the Postal Service's RHB liability. We recognize that investing employee and Postal Service future retirement contributions in a diversified portfolio of stocks, bonds, and other assets requires legislative change. Therefore, we are not making a recommendation regarding diversification of retirement investments. We continue to encourage management to work with Congress on this and other matters to address unfunded retirement liabilities.

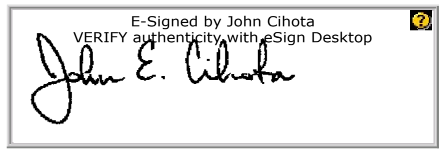
"We recommended management work with the OPM to update the mortality improvement assumptions it uses to calculate the Postal Service's RHB liability."

Transmittal Letter

OFFICE OF INSPECTOR GENERAL
UNITED STATES POSTAL SERVICE

March 6, 2020

MEMORANDUM FOR: JOSEPH CORBETT
CHIEF FINANCIAL OFFICER AND
EXECUTIVE VICE PRESIDENT



FROM: John E. Cihota
Deputy Assistant Inspector General
for Finance and Pricing

SUBJECT: Audit Report – Options to Reduce Unfunded Retirement Liabilities (Report Number 19BG010FT000-R20)

This report presents the results of our audit of Options to Reduce Unfunded Retirement Liabilities.

We appreciate the cooperation and courtesies provided by your staff. If you have any questions or need additional information, please contact Lorie Nelson, Director, Finance, or me at 703-248-2100.

Attachment

cc: Postmaster General
Corporate Audit Response Management

Results

Introduction/Objective

This report presents the results of our self-initiated audit of Options to Reduce Unfunded Retirement Liabilities (Project Number 19BG10FT000). The objective of this audit was to explore two options to address reducing unfunded retirement liabilities. See Appendix A for additional information.

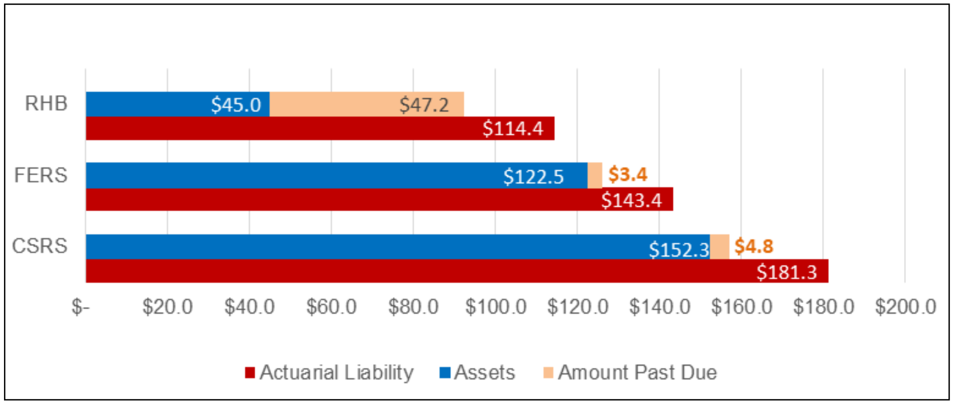
Background

The U.S. Postal Service is required by law to participate in two government-wide defined benefit[1] pension plans that are administered by the U.S. Office of Personnel Management (OPM): the Civil Service Retirement System (CSRS) and the Federal Employees Retirement System (FERS). The assets of these plans are held in the Civil Service Retirement and Disability Fund (CSRDF), managed by the Office of Personnel Management (OPM) and the U.S. Department of the Treasury (Treasury), and currently limited to fixed-rate Treasury securities (Treasuries). Although the OPM accounts for the CSRDF as a single fund, they annually produce data on Postal Service CSRS and FERS assets, as if the assets were separate.[2] These disclosures include annual returns on Postal Service CSRS and FERS assets, which are identical to returns on government-wide CSRS and FERS assets. This result implies that the Postal Service owns the equivalent of a certain share of CSRDF assets, which is the same percentage for every separate Treasury security owned by the CSRDF. At the end of FY 2018, Postal Service investments accounted for 30.9 percent of the CSRDF.[3]

In addition to participation in pension programs, eligible retirees may continue participating in the OPM-administered Federal Employees Health Benefits Program. The Postal Service is responsible for the employer's share of health benefit premium costs for its retirees. Assets for funding Retiree Health Benefits (RHB) reside in the Postal Service RHB Fund, which is also managed by the OPM and Treasury and currently limited to investments in fixed-rate Treasuries. As only the Postal Service is required to pay into the RHB Fund, 100 percent of its assets are available to pay retirees' health care premiums.

Using OPM figures as of the end of fiscal year (FY) 2019,[4] we calculated that Postal Service retirement assets totaled $319.8 billion.[5] These funds cover about one million Postal Service employees and retirees[6] who participate in the federal pension programs as well as those who are (or may become) eligible for RHB. Calculations of the CSRS, FERS, and RHB liabilities exhibit varying degrees of sensitivity to certain economic and demographic assumptions that are subject to change. The OPM projected that Postal Service retirement liabilities totaled $439.1 billion. Each of the three liabilities has an unfunded portion – the difference between the estimated liability or commitment to current and future retirees and the assets set aside to fund benefits (see Figure 1).

Figure 1. OIG Estimated Valuations for September 30, 2019 (in Billions)



Source: OIG calculations based on OPM-provided data in the Postal Service FY 2019 Report on Form 10-K.

1 In a defined benefit plan, the employer guarantees a specific retirement benefit amount for each participant. This amount is usually based on the employee's salary, years of service, or other factors. The employer bears the investment risk of ensuring the defined benefit fund has enough assets to pay retirees.
2 These disclosures are required by the Postal Accountability and Enhancement Act of 2006, P.L.109-435.
3 Our calculation was based on the OPM's projected values for Postal Service CSRS and FERS investments, and other data provided by the OPM.
4 For CSRS and FERS, the OPM's figures for FY 2019 are projections.
5 Our calculations of assets exclude amounts past due as of September 30, 2019, since unpaid amounts are not available for investment. These amounts total $4.8 billion, $3.4 billion, and $47.2 billion, for CSRS, FERS, and RHB, respectively.
6 The pension and RHB programs extend benefits to retirees' families in certain situations. Our use of the word "retiree" herein includes all beneficiaries.

The Postal Service did not make $8.2 billion of required fiscal year end payments toward unfunded pension liabilities from FY 2014 through FY 2019. As of the end of FY 2019, the Postal Service also had not made $47.2 billion of required RHB payments that were due in FY 2012 through FY 2019. These past due retirement payments far exceed the cash available to pay them, and making annually-required retirement payments in the future would likely eliminate Postal Service liquidity by the end of FY 2021. Assuming no payments into the Postal Service RHB Fund, the U.S. Government Accountability Office (GAO) projected that the RHB Fund balance will be eliminated by FY 2030.[7] In its report, GAO listed policy approaches to address Postal Service RHB, based in part on prior legislative proposals.

In the current meeting of Congress, two bills to address retirement funding levels have been introduced in the U.S. House of Representatives (H.R.).[8] The first would eliminate required payments into the RHB Fund, and the second would permit investment diversification for a portion of RHB Fund assets.

H.R. 2382, the USPS Fairness Act, was introduced on April 29, 2019, and passed by the House of Representatives on February 5, 2020.[9] It would eliminate past and future prepayment of the Postal Service RHB by repealing Title 5 USC § 8909a(d). This legislation would eliminate the $47.2 billion in past due payments for RHB as well as future payments for normal costs and amortization of the unfunded portion of the RHB liability. The Postal Service would be responsible for paying the employer portion of RHB premiums, initially by using the remaining balance in the RHB Fund.

H.R. 2553, the Postal Service Financial Improvement Act of 2019, was introduced on May 7, 2019.[10] It would permit investment of 25 percent of the RHB Fund in index funds modeled after the federal government's Thrift Savings Plan (TSP). After five years, the investment percentage could be increased to a maximum of 30 percent. The act would require the index funds to replicate the performance of the longest-term target date asset allocation investment fund established by the Federal Retirement Thrift Investment Board.[11] H.R. 2553 would also establish an investment committee and require professional asset management, annual independent audits, and annual reports to Congress.

The Postal Service has also requested legislation that would reduce its unfunded RHB liability. In congressional testimony on April 30, 2019,[12] the Postmaster General (PMG) asked Congress to allow it to follow the common practice of having Medicare serve as the primary provider of health care insurance for its current and future retirees and to permit its participation in the Medicare Part D prescription drug benefit program. The PMG stated this legislation would eliminate about 90 percent of the Postal Service's unfunded RHB liability.

The National Association of Letter Carriers (NALC) expressed their support for investment diversification of future RHB contributions and for the PMG's Medicare integration proposals. They also suggested another approach for reducing the RHB liability, stating Congress should reduce the Postal Service's prefunding target of 100 percent of the RHB liability to 60 percent of the liability for only those employees who are retirement-eligible and who qualify for such benefits (vested liability). The NALC estimated this would reduce the retiree health funding burden for future retiree health by at least $35 billion. Similar to the NALC's proposal to fund a portion of the (vested) RHB liability, legislation submitted in past sessions of Congress included an 80 percent funding level target for the Postal Service's RHB liability, instead of the 100 percent target in current law.[13]

7 *Postal Retiree Health Benefits, Unsustainable Finances Need to Be Addressed* (Report Number GAO-18-602, August 2018).
8 Coverage of legislation proposed in the current meeting of Congress is as of December 23, 2019.
9 For text of the proposed legislation, see www.congress.gov, Current Legislation.
10 For text of the proposed legislation, see www.congress.gov, Current Legislation.
11 This fund is currently known as the L 2050 and its allocations include about 82 percent of assets in equities (stocks) and about 18 percent in fixed-income (interest-bearing) assets.
12 *Statement of Postmaster General and Chief Executive Officer Megan J. Brennan*, before the House Committee on Oversight and Reform, U.S. House of Representatives, Hearing on: "The Financial Condition of the Postal Service," April 30, 2019.
13 For example: Senate bills S. 2629, in the 115th Congress (2018), and S.2051, in the 114th Congress (2015).

Our OIG has previously published several reports on Postal Service retirement liabilities and investments (see Prior Audit Coverage). In a January 2015 report,[14] we noted that requiring retiree participation in Medicare as part of a health care plan would reduce the retiree health care liability by over $40 billion. We also noted that moving to 80 percent funding for future health care liabilities reduces the adverse impact of changing assumption fluctuations.

In a May 2017 report, we reported a potential reduction in retirement liabilities if the OPM used Postal Service, rather than federal government-wide demographic and economic assumptions in the retirement liability calculations.[15] The OPM ultimately began using Postal Service-specific demographic assumptions in its calculations of Postal Service retirement liabilities in FY 2018.

We also published three reports related to alternative investments of Postal Service retirement assets.

- In September 2017, we reported that diversifying retirement assets and future contributions could fully fund CSRS, FERS and RHB liabilities within 20 years.[16]
- In November 2018, we reported that investing a portion of Postal Service retirement assets in Treasury Inflation-Protected Securities (TIPS)[17] could increase the returns on the three Postal Service retirement funds by about $1.4 billion annually over the following two years.[18]
- In May 2019, we reported that diversifying pension plan assets is a common practice among 11 foreign posts analyzed.[19]

In each of the three reports, we mentioned or discussed the need for sound governance to provide adequate protections for retirees. Further, investment expense management is an important component of sound governance, since fees paid to professional investment managers can range widely, in part depending on asset allocations.

For this report, we retained actuarial consulting assistance to explore the impact of an update to the life expectancy assumptions underlying the RHB liability[20] and a pension investments consultant (investment consultant) to explore the value of asset diversification[21] for all post-FY 2019 employer (Postal Service) and employee contributions to the CSRS, FERS, and RHB funds. This analysis also included comparison of proposed asset diversification to allocations available in the TSP's Lifecycle funds.[22]

Finding #1: Mortality Improvement Assumptions for Retiree Health Benefits Liability

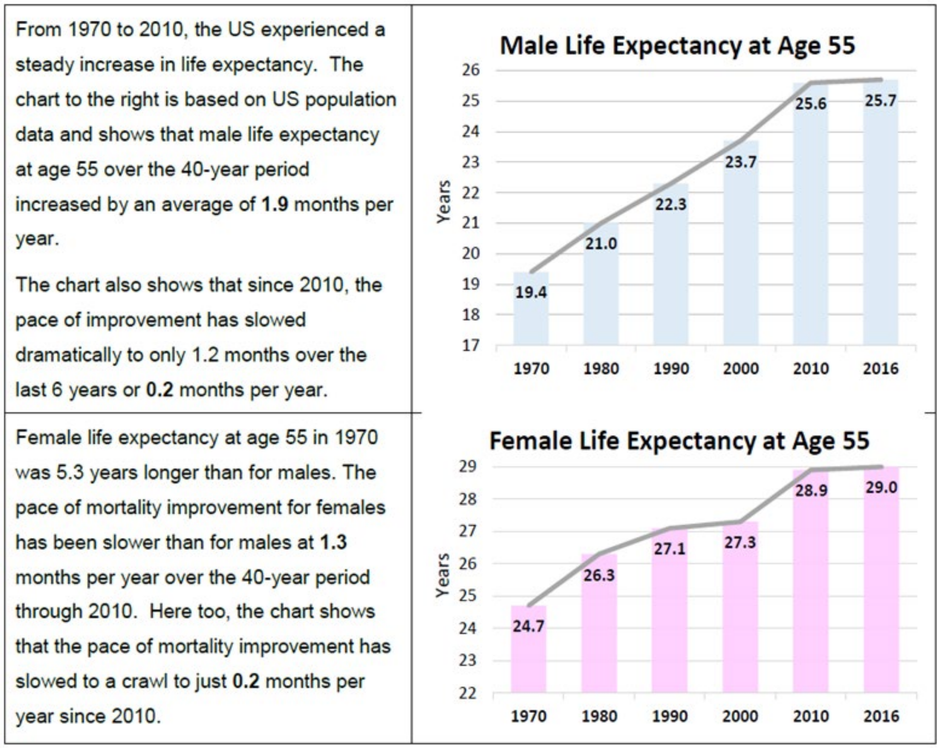
The OPM's measurement of the RHB liability should incorporate updated assumptions regarding future increases in life expectancy (mortality improvement) to capture changes that have occurred since 2010.[23]

The OPM calculates the Postal Service's RHB liability based on Postal Service-specific data. They use actuarial assumptions in their calculations, such as short- and long-term improvements in life expectancy, number of years employees work, and when employees will retire and start collecting benefits. The OPM's mortality tables reflect Postal Service life expectancies, supplemented with assumptions as to how quickly life expectancies will increase in the short-term and long-term.

14 *Considerations in Structuring Estimated Liabilities* (Report Number FT-WP-15-003, dated January 23, 2015).
15 *Update for Measuring Pension and Retiree Health Benefits Liabilities* (Report Number FT-AR-17-007, dated May 2, 2017).
16 *Postal Service Retiree Funds Investment Strategies* (Report Number FT-WP-17-001, dated September 20, 2017).
17 TIPS are interest-bearing securities whose principal is adjusted by changes in a Consumer Price Index (CPI). With inflation (a rise in the CPI), the principal increases, protecting the investor against inflation. With deflation, the principal decreases. However, at maturity, investors receive the adjusted principal or the original principal, whichever is greater.
18 *Treasury Inflation-Protected Securities* (Report Number FT-AR-19-003, dated November 26, 2018).
19 *Foreign Posts' Retirement Asset Investments* (Report Number FT-WP-19-001, dated May 21, 2019).
20 PRM Consulting (PRM) provided actuarial calculations for RHB, and Korn Ferry provided actuarial calculations for the CSRS and FERS pensions.
21 Segal Marco Advisors (Segal) provided analysis of asset diversification for Postal Service retirement investments.
22 The TSP is a retirement savings and investment plan for federal employees.
23 We anticipated that updated mortality improvement assumptions could reduce both pension and RHB liabilities. However, for this report, we focus on the RHB liability only. We based our decision to focus on RHB on the results of modeling work conducted in 2018, in which the estimated pension liabilities were within about 4 percent (reasonable differences among actuaries) of data later released by the OPM, but the RHB estimate differed by $13.2 billion (13.1 percent) from the OPM's subsequently released data. This $13.2 billion difference prompted follow-up analysis that is reflected in this report.

In this decade, mortality improvement has shown virtually no change.[24] This pause occurred after a century of generally rapid improvement, and we believe this development foretells a long-term future in which mortality improvement will be much slower than in the past. As one example of the trend in life expectancy, Figure 2 shows historical changes over more than four decades for males and females at age 55, with no material differences between 2010 and 2016.

Figure 2. Male and Female Life Expectancy at Age 55



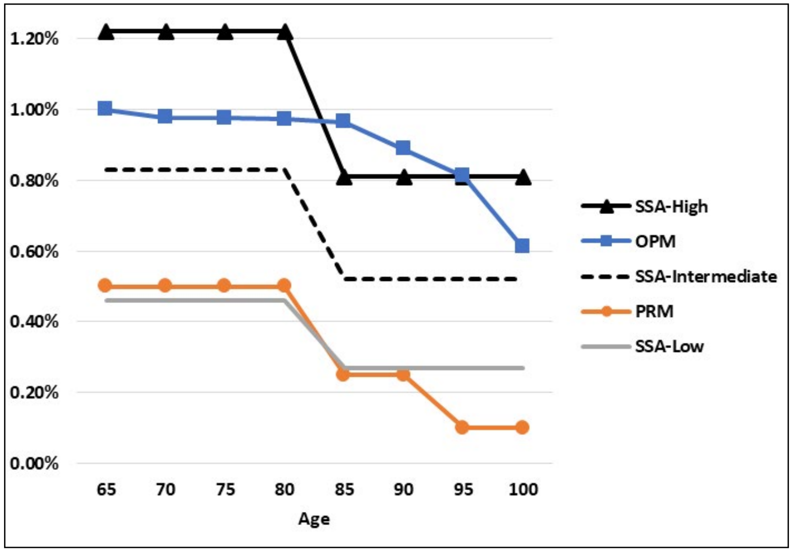
Source: Actuarial consultant (PRM).

The OPM's assumed long-term rate of mortality improvement is 1 percent per year for retirees aged 65, and declines to near 0.90 percent by age 90. Based in part on recent published studies on mortality improvement, including studies on U.S., Canada, and major European countries, the analysis suggests the OPM's long-term projections are too optimistic; they do not adequately adjust for a pronounced change in the trend.

Incorporating analysis of recent experience, but not accepting virtually zero mortality improvement as permanent, our actuarial consultant (PRM) projects a mortality improvement rate of 0.5 percent per year for retirees from ages 65 to 80, and a decline to 0.25 percent for retirees between the ages of 85 and 90.

The Social Security Administration's (SSA) actuaries' intermediate assumption (their best estimate of future experience) is a mortality improvement rate of 0.83 percent for those aged 65 through 80. They also publish alternative assumptions – one more optimistic (high) and one more pessimistic (low). All of their assumptions have exceeded the actual rate of mortality improvement in each of the four years 2014 through 2017. Figure 3 shows mortality improvement assumptions for the OPM, the SSA (high, intermediate, and low), and PRM.

Figure 3. Mortality Improvement Rate Assumptions



Source: Actuarial consultant (PRM).

24 The most recently available mortality data are through 2017.

The OPM's projected long-term rate of mortality improvement is above the SSA's intermediate assumption, and for ages 85 – 95, above the SSA's optimistic assumption. PRM's long-term projection generally tracks the SSA's pessimistic assumption through age 90.

Using the OPM's census data and mortality improvement assumptions, our actuarial consultant estimated an RHB liability of $112.9 billion at the end of FY 2018.[25] Changing only the mortality improvement assumptions, our consultant calculated an RHB liability of $108.7 billion, resulting in a $4,208,914,264 reduction in the RHB liability.[26]

Recommendation #1:
We recommend the **Chief Financial Officer and Executive Vice President** work with the Office of Personnel Management to update the mortality improvement assumptions it uses to calculate the Postal Service's retiree health benefits liability.

Finding #2: Retirement Asset Investments for Future Contributions

Analysis of Postal Service retirement investments highlights the significant risk embedded in the current investment strategy, despite the safety of funds held in Treasury. Under the law, which directs these investments to special-issue, fixed-rate Treasuries,[27] the Postal Service's total unfunded retirement liabilities will likely increase over 20 years, from $110 billion to an estimated $174 billion,[28] assuming it makes all projected CSRS, FERS, and RHB retirement payments. However, investing post-FY 2019 Postal Service retirement contributions (and employee contributions to CSRS and FERS) in a diversified portfolio could result in unfunded retirement liabilities that are much lower than the estimated $174 billion, ranging from $104 billion unfunded to $39 billion overfunded.

"Under the law, total unfunded retirement liabilities will likely increase over 20 years from $110 billion to an estimated $174 billion. Investing post-FY 2019 contributions in a diversified portfolio could result in much lower unfunded retirement liabilities."

Current Investment Strategy

The investment strategy employed by the OPM and Treasury has two key components, one addressing a main feature of the assets and the other addressing maturity distribution. All investments are at fixed interest rates and their annual maturities are generally spread over 15 years.

The OPM and Treasury rebalance retirement assets each year at the end of June, generally ensuring that similar amounts of assets mature in each of the next 15 years (commonly called laddering), with some exceptions.[29] Based on this practice, the investment consultant incorporated ongoing laddering of CSRS, FERS, and RHB maturities in its modeling.

A laddering approach can be beneficial, but a major consequence is limited participation in rising interest rates. Even if market interest rates rise sharply, the yields on existing Postal Service retirement assets can rise only gradually. Under perfect laddering of investment maturities, less than 7 percent (1/15) of the investments would be replaced with higher-yielding investments in any year, leaving about 93 percent (14/15) of investments with unchanged yields. While CSRDF assets were again laddered over 15 years in June 2019, the OPM and

25 The 1 percent difference between the OPM's $114.0 billion estimate and our consultant's estimate is primarily due to the use of different valuation software and individual versus aggregate entry age normal cost methods. Among actuaries using different software and techniques, a 1 percent difference in measurement of a retirement liability is considered minor.

26 This reduction represents the cumulative impact to the RHB liability as of the end of FY 2018. It does not correlate directly to the total reduction in RHB normal costs and amortization payments. Reductions in payments for RHB normal costs and amortization as a result of changed mortality improvement assumptions would total $868 million in the 2 years following FY 2018.

27 Special-issue Treasuries are available only to trust funds and are designated as nonmarketable. Investments in other government-guaranteed securities are permissible, provided the Secretary of the Treasury determines that such investments are in the public interest. In this report, we use "special-issue" in lieu of "special-issue, fixed-rate."

28 This $174 billion range after 20 years is based on a starting point of $110 billion — the sum of estimated Postal Service unfunded retirement liabilities at the end of FY 2018. The source of data for the calculations is the Postal Service FY 2018 Report on Form 10-K.

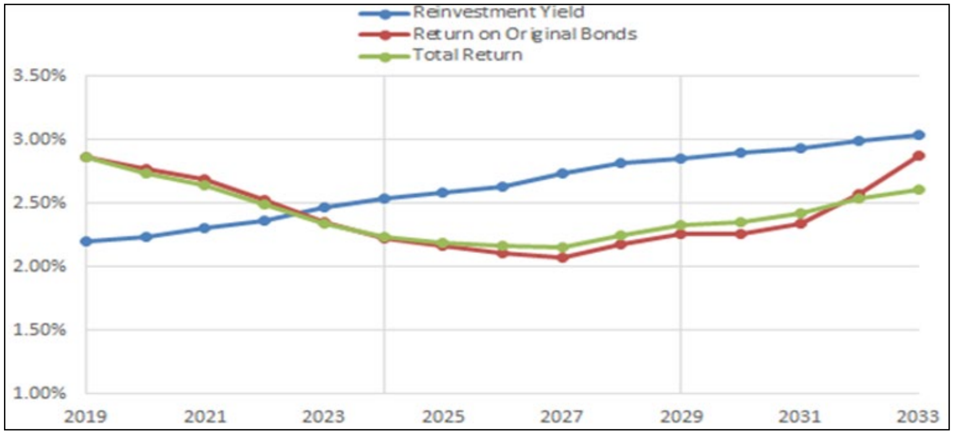
29 In a given year, each of the OPM's June 30 investments carries an identical yield, equal to the average of all marketable Treasuries with four or more years to maturity. When the Treasury yield curve is upward sloping, as is usually the case, this means that some of the investments carry yields above those available in the bond market at the time of the investments.

Treasury reduced the RHB Fund's maximum maturity from 15 to 14 years. This departure from past practice may reflect uncertainty regarding future contributions and interest earnings. In FY 2019, the RHB Fund's return declined for the 11th time in the past 12 years, to 2.65 percent.

A laddering strategy, well into a period of historically low interest rates, does not provide the Postal Service returns that reduce its unfunded retirement liabilities. For example, Figure 4 shows the potential effects of the laddering of the Postal Service's CSRS and FERS assets combined, in an environment of rising interest rates post-FY 2019, through FY 2033. Each year's total return (green line) is a combination of the known return on existing Treasuries (red line) and the investment consultant's estimate of the most likely returns the funds will yield when re-invested in new Treasuries (blue line).[30] The total yields are projected to remain below the 4.25 percent long-term return assumed by the OPM, in some years by more than 2 percentage points.

> ***"A laddering strategy, well into a period of historically low interest rates, does not provide the Postal Service returns that reduce its unfunded retirement liabilities."***

Figure 4. Current Strategy Baseline Return Profile



Source: Investment consultant (Segal).

Given the recent low interest rate environment and the outlook for low expected returns on Treasuries, our investment consultant anticipates the current investment strategy for the Postal Service's benefit plans will have a modest expected return of about 2.5 percent per year over the next two decades — well below the 4.25 percent assumption used by the OPM for pensions and the 3.60 percent assumption used by the OPM for RHB.[31] The modeling results are based on a starting point at the end of FY 2018.[32]

Two Sets of Three Diversified Portfolios

Although the Postal Service has not made all its required payments for retirement obligations, including its mandated $4.6 billion in FY 2019 for RHB,[33] it and its employees have continued making contributions. In the two-year period ended FY 2018, the Postal Service and its employees contributed a total of $8 billion toward pension benefits.[34] Investing post-FY 2019 employee and Postal Service

30 In the investment consultant's modeling, RHB reinvestment yields and returns on original bonds generally track those shown in Figure 4 for the CSRDF, based on historical laddering on June 30 of each year. The modeling work preceded the recent reduction in the RHB Fund's maximum maturity, from 15 years to 14. Also, returns on RHB assets would compare to the OPM's assumed 3.60 percent discount rate.
31 Assumed long-term rates of return are also referred to as discount rates. For this report, we used FY 2018's 3.60 percent discount rate for the analysis of RHB. In FY 2019, this discount rate was reduced to 3.50 percent. The 4.25 percent assumption for pensions was unchanged in FY 2019.
32 In the investment consultant's modeling, RHB reinvestment yields and returns on original bonds generally track those of the CSRDF. The modeling preceded the recent reduction in the RHB Fund's maximum maturity, from 15 years to 14 years.
33 The Postal Service did not make any required RHB prefunding payments in FYs 2012 through 2019.
34 This is the most recent actual data available from OPM. Contributions for CSRS consist of employee contributions only. Both the Postal Service and employees contributed to FERS.

retirement contributions in diversified portfolios could increase returns above those available through the current investment strategy. The investment consultant considered 10 asset classes, each with its own 20-year projected annual rate of return and standard deviation.[35] The higher the standard deviation, the higher the variation in results and, therefore, the higher the risk.[36] Table 1 lists the assumed rates of return and standard deviations for the 10 asset classes included in the analysis.

Table 1. Projected 20-Year Rates of Return and Standard Deviations by Asset Class

Asset Class	Geometric Return[37]	Standard Deviation
OPM Investments	2.5%	0.5%
TIPS	3.8%	5.5%
Core Fixed Income	3.9%	5.5%
High Yield	5.8%	10.0%
Emerging Markets Debt (50% Local Currency)	6.2%	11.0%
U.S. Equity	7.3%	17.5%
Developed Equity (Unhedged)	7.6%	19.0%
Emerging Markets Equity	9.8%	24.0%
Multi Asset Class Solutions (MACS)[38]	6.9%	9.0%
Private Equity	10.6%	22.5%
Real Estate (Unleveraged)	6.3%	11.8%

Source: Investment consultant (Segal).

Our investment consultant projected that relatively safe assets such as TIPS could have a comparatively low 3.8 percent return annually and 5.5 percent standard deviation. It expects riskier assets such as private equity to return 10.6 percent annually, with a significantly higher standard deviation of 22.5 percent.

Using these assets, our investment consultant developed two types of diversified portfolios — traditional and alternative — based on the investment of post-FY 2019 employee and Postal Service contributions to the CSRS, FERS, and RHB funds. The traditional portfolios are invested to varying degrees in public equities, TIPS, and high quality, fixed income investments. The consultant then simulated results for the set of three traditional and three alternative portfolios: low-risk, medium-risk, and high-risk. The alternative portfolios are invested to varying degrees in high-yield bonds, emerging market bonds, real estate, private equity, and MACS. All six portfolios are indicative of the choices fund managers must make to satisfy the inherent trade-off between investment returns and risk appetite.[39]

35 Standard deviation is a measure of variation in annual returns.
36 For purposes of this report, “risk” and “standard deviation” are interchangeable terms.
37 The geometric return is primarily used to calculate an average rate of return (in this case per year) on investments that are compounded. It uses a complex formula that differs from the average rate of return (sum of each year’s return divided by the number of years).
38 MACS include tactical asset allocation of stocks, bonds, commodities, currencies, risk-managed equity strategies, and non-conventional fixed income strategies.
39 Risk appetite is routinely described as the maximum amount of risk an investor will tolerate comfortably. Governance would include the Postal Service defining an acceptable level of risk for each of the three retirement funds, perhaps based partly on their respective funding levels.

Table 2 summarizes the expected rates of return, standard deviations, and Sharpe ratios[40] of each of the portfolios for a 20-year period, with returns based on the most likely (50th percentile) outcome among 2,000 potential scenarios. Percentiles represent the percent of model outcomes above and below that level. The 50th percentile represents the median, or the dollar amount whereby one-half of the outcomes exceed the dollar amount, and one-half of the outcomes are at or below the dollar amount. The Sharpe ratio compares the expected return to the amount of risk of a given portfolio. Generally, the greater the Sharpe ratio, the more attractive the risk-adjusted return.

Table 2. Portfolio Asset Allocation and Performance Measures Over 20 Years

Measurements	Current	Traditional Portfolios			Alternative Portfolios		
	Very Conservative	Low Risk	Medium Risk	High Risk	Low Risk	Medium Risk	High Risk
Compound Rate of Return	2.5%	4.0%	4.9%	5.6%	4.8%	5.7%	6.5%
Standard Deviation	0.5%	5.8%	8.0%	11.0%	5.9%	8.4%	11.2%
Sharpe Ratio		0.31	0.35	0.35	0.43	0.43	0.42

Source: Investment consultant (Segal).

The current portfolio of special-issue Treasuries has the lowest projected rate of return, at 2.5 percent, and the lowest standard deviation, 0.5 percent. The low-risk traditional portfolio invests 60 percent in TIPS, 20 percent in high-quality bonds (core fixed income), and 20 percent in equities.[41] It has a projected return of 4.0 percent and a relatively low standard deviation of 5.8 percent. The high-risk alternative portfolio allocates 20 percent of assets to TIPS, 45 percent to equities,[42] and 27 percent to riskier investments, including MACS, private equity, and real estate. This portfolio has an expected return of 6.5 percent and a standard deviation of 11.2 percent.

Table 3 shows allocations, risk, and returns for the current and prospective portfolios in more detail. The prospective traditional portfolios are T1, T2, and T3, with T1 being low risk, T2 medium risk, and T3 high risk. The prospective alternative portfolios are A1, A2, and A3, with similarly escalating risk. As indicated by their standard deviations, T1 and A1 have similar levels of risk, as do the T2 and A2 and T3 and A3 portfolios.

40 The Sharpe ratio is calculated by taking an asset's average return, subtracting a risk-free rate of return, and dividing the difference by the standard deviation of the asset's returns.
41 The 20 percent allocation to stocks includes 10 percent to U.S. stocks, 8 percent to developed markets, and 2 percent to emerging markets.
42 The 45 percent allocation to stocks includes 22 percent to U.S. stocks, 18 percent to developed markets, and 5 percent to emerging markets.

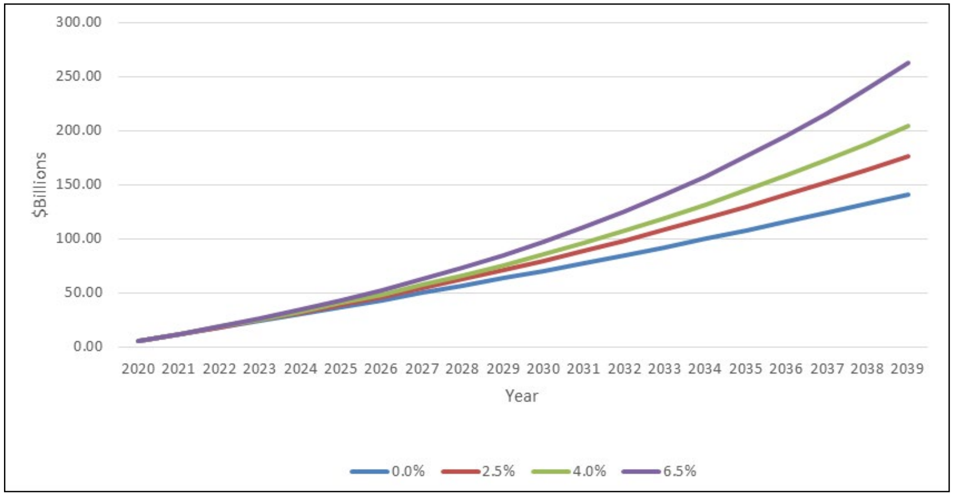
Table 3. Prospective Portfolios' Allocations, Risks, and Returns

	Asset Class	Current	T1	T2	T3	A1	A2	A3
Fixed Income	TIPS		60.0%	50.0%	40.0%	50.0%	37.0%	20.0%
	Core Fixed Income		20.0%	10.0%		10.0%	2.0%	
	High Yield					2.5%	3.5%	4.0%
	Emerging Markets Debt					2.5%	3.5%	4.0%
Equity	US Equity		10.0%	20.0%	30.0%	7.0%	15.0%	22.0%
	Developed Equity (Unhedged)		8.0%	16.0%	24.0%	6.0%	12.0%	18.0%
	Emerging Markets Equity		2.0%	4.0%	6.0%	2.0%	4.0%	5.0%
Alternatives	MACS					5.0%	6.0%	7.0%
	Private Equity					5.0%	7.0%	10.0%
	Real Estate					10.0%	10.0%	10.0%
	Sum		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Totals	% Fixed Income		80.0%	60.0%	40.0%	65.0%	46.0%	28.0%
	% Equity		20.0%	40.0%	60.0%	15.0%	31.0%	45.0%
	% Alternatives					20.0%	23.0%	27.0%
Risks & Returns	Compound Return	2.5%	4.0%	4.9%	5.6%	4.8%	5.7%	6.5%
	Standard Deviation	0.5%	5.8%	8.0%	11.0%	5.9%	8.4%	11.2%
	Sharpe Ratio		0.31	0.35	0.35	0.43	0.43	0.42

Source: Investment consultant (Segal).

Relatively small differences in annual returns could produce large differences in asset values over a 20-year period. For example, based on the investment consultant's median rates of return (50th percentile), Figure 5 shows the effect of investing post-FY 2019 RHB contributions in the most aggressive portfolio (A3, 6.5 percent, purple line) and conservative portfolio (T1, 4.0 percent, green line), versus the current strategy (2.50 percent, red line). The blue line shows a base, the cumulative contributions by year without interest earnings.[43] After 20 years, the value of RHB contributions could grow from zero to about $177 billion under the current strategy. However, using the T1 conservative strategy, the value could grow to about $204 billion – a difference of $27 billion. Using the A3 aggressive strategy, the value could grow to about $262 billion – a difference of $85 billion versus the current strategy's projected value.

Figure 5. Comparative Growth in RHB Contributions ($ Billions)



Source: OIG Analysis of data provided by our consultants.

To simulate funding levels for the traditional and conservative portfolios, the investment consultant assumed that all future retirement payments of the Postal Service and its employees (as applicable) are deposited in private sector accounts beginning in FY 2020.[44] For each of the three retirement plans, funds held in Treasury at the end of FY 2019 remain in Treasury, as does all future interest paid on the funds. Benefits payments are withdrawn from Treasury to make pension payments to retirees and health care premium payments on behalf of retirees. Payments would be disbursed from the private sector accounts only when the CSRS, FERS, or RHB funds in Treasury are insufficient to pay benefits.

Our investment consultant estimated funding levels for each retirement plan after 20 years, using a statistical simulation model. Projected cash flows included contributions and benefits disbursements.[45] Table 4 displays the results of the simulations, showing the three retirement plans' surpluses or deficits in a range of potential outcomes (percentiles), with the most likely outcome being the 50th percentile. The RHB scenarios reflect incorporation of updated (slower) mortality-improvement.[46] The percentiles convey the percent of outcomes equal to or below their levels. For example, the 95th percentile represents the dollar amount at which 5 percent of the outcomes exceed the dollar amount and 95 percent of the outcomes are at or below the dollar amount.

43 For this analysis, we did not subtract benefits disbursements, which would lower the trajectory of all lines in Figure 5.
44 For each of the three retirement plans, the actuarial consultants based their cash flow projections on the OPM's assumed investment rates of return (4.25 percent for pensions and 3.60 percent for RHB) structured to liquidate unfunded liabilities on dates required by law.
45 The investment consultant used Monte Carlo techniques, with 2,000 trials that stochastically varied the potential returns and inflation (Consumer Price Index for All Urban Consumers (CPIU) and medical, as applicable) from year to year. The simulations incorporated the mean return on each asset, the standard deviation of the asset returns, and an algorithm that rebalanced the portfolios' asset allocations.
46 In the seven investment portfolios, at the 5th, 50th, and 95th percentiles, use of these assumptions, versus the OPM's mortality improvement assumptions, improved funding levels by $1 billion to $9 billion after 20 years.

Table 4. Summary of Simulation Results — Surplus (Deficit) After 20 Years ($ Billions)

Portfolio	Risk Level	CSRS			FERS			RHB		
		Bottom 5%	Median 50%	Top 95%	Bottom 5%	Median 50%	Top 95%	Bottom 5%	Median 50%	Top 95%
Current Investments *Special-Issue Treasuries.*	Very Conservative	(80)	(41)	(3)	(178)	(67)	16	(95)	(66)	(36)
Traditional *Publicly traded stocks and bonds.*	Conservative (T1)	(74)	(29)	10	(132)	(36)	58	(91)	(39)	45
	Medium Risk (T2)	(71)	(22)	35	(127)	(16)	127	(91)	(21)	115
	High Risk (T3)	(69)	(14)	74	(131)	4	221	(98)	(3)	207
Alternative *Publicly traded stocks and bonds plus non-traditional asset classes including high yield bonds, emerging market bonds, private real estate, private equity, and MACS.*	Conservative (A1)	(71)	(24)	23	(122)	(20)	94	(83)	(24)	80
	Medium Risk (A2)	(67)	(15)	57	(119)	3	176	(86)	(3)	161
	High Risk (A3)	(66)	(5)	105	(122)	26	292	(92)	18	275

Source: Investment consultant (Segal).

The potential results highlight the significant risk embedded in the current investment strategy: substantial increases in the underfunding of the Postal Service's CSRS and FERS liabilities and no improvement in the funding of RHB. At the 50th percentile, the CSRS fund would be $41 billion underfunded after 20 years, the FERS would be $67 billion underfunded, and RHB would be $66 billion underfunded. The total underfunding of the three retirement liabilities would increase from $110 billion to an estimated $174 billion, despite billions of dollars in contributions from the Postal Service and its employees (for the CSRS and the FERS).

Under projected rates of return for asset classes, the prospective portfolios generally perform better than the current investments for all three retirement funds. The most conservative portfolio, T1, shows better financial outcomes than the current strategy over the 20-year period. With T1, at the 50th percentile, the CSRS funding level would be improved by $12 billion compared to the current strategy, the FERS funding level by $31 billion, and the RHB funding level by $27 billion.

The traditional portfolios perform well in part because they include future allocations to TIPS,[47] which provide the potential to better align asset growth with any CPI-driven liability growth.[48] This holds true to a lesser degree for the RHB liability, which is responsive to health care premium inflation. In the prospective portfolios, asset allocations to TIPS range from 20 percent to 60 percent.

Thrift Savings Plan – Lifecycle Funds

The TSP is a retirement savings and investment plan for federal employees administered by the Federal Retirement Thrift Investment Board. It is a defined contribution plan, for which the Postal Service's obligation is limited to the employer portion of contributions. The TSP offers participants five core funds (asset classes) and an assortment of lifecycle funds that feature different allocations to the five core funds. Our investment consultant compared prospective portfolios' assets to those in TSP funds, and found some similarities, including strong similarities in the characteristics, returns, and risks of two TSP funds and two traditional portfolios when paired separately.

The five core TSP funds include two bond funds (G and F): one composed of government securities similar to OPM retirement investments[49] and another composed of traditional investment-grade U.S. bonds. The three remaining core funds are equity funds – the C, S, and I – respectively an S&P 500 fund, a U.S. stock market completion fund,[50] and an international equity fund focused on Europe, Australasia, and the Far East (EAFE). The five TSP funds are broad in nature and represent a significant proportion of the investment universe. See Table 5 for details on the five core TSP funds.

Table 5. Five Core TSP Funds and Their Characteristics

TSP	G Fund	F Fund	C Fund	S Fund	I Fund	L Fund
Included in Current or Alternative Diversified Strategies	Yes	Yes	Yes	Yes	Yes	
Asset Class	Current Strategy	Core Fixed Income	U.S. Equity	U.S. Equity	EAFE	
Description of Investments	Government securities (specially issued to the TSP)	Government corporate and mortgage – backed bonds	Stocks of large and medium – sized U.S. companies	Stocks of small to medium – sized U.S. companies (not included in the C Fund)	International stocks of more than 20 developed countries	Invested in the G, F, C, S, and I Funds

47 See "Treasury Securities and Programs" for further information.
48 While TIPS are contractually linked to the Consumer Price Index for All Urban Consumers (CPI-U), CSRS and FERS cost-of-living adjustments are linked to the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W). We calculated a correlation of 0.98 between CPI-U and CPI-W, using year-over-year percent changes for the 120 months ended September 2019.
49 The interest rate on the G Fund is based on the weighted average yield of all outstanding Treasury notes and bonds with 4 or more years to maturity, and the fund's interest rate resets monthly. Interest rates earned on the OPM's Treasury securities are based on the same formula, at the time of purchase. Interest rates on the OPM's securities reset at maturity.
50 This fund invests in stocks of small to medium-sized U.S. companies (not included in the C Fund).

TSP	G Fund	F Fund	C Fund	S Fund	I Fund	L Fund
Objective of Fund	Interest income without risk of loss of principal	To match the performance of the Bloomberg Barclays U.S. Aggregate Bond Index	To match the performance of the Standard & Poor's 500 Index	To match the performance of the Dow Jones U.S. Completion Total Stock Market (TSM) Index	To match the performance of the MSCI EAFE Index	To provide professionally diversified portfolios based on various time horizons, using the G, F, C, S, and I Funds
Risk	Inflation risk	Market risk, Credit risk, Prepayment risk, Inflation risk	Market risk, Inflation risk	Market risk, Inflation risk	Market risk, Currency risk, Inflation risk	Exposed to all the types of risk to which the individual TSP funds are exposed – but total risk is reduced through diversification among the five individual funds
Volatility	Low	Low to moderate	Moderate	Moderate to high – historically more volatile than C fund	Moderate to high – historically more volatile than C fund	Asset allocation shifts as time horizon approaches to reduce volatility

Source: Investment consultant (Segal).

The TSP lifecycle funds use professionally determined investment allocations to the five core funds, with allocations tailored to meet investment objectives based on various time horizons. For each fund, the objective is to strike an optimal balance between its expected risk and return. The lifecycle funds represent different risk appetites, which may be consistent with the age-driven investment horizon of individual investors. For example, an individual drawing a pension or planning to start withdrawing funds prior to 2020 might choose to emphasize the relative safety of the L Income Fund. An individual with a withdraw horizon beginning between 2025 and 2034 might allocate a significant portion of assets to the L 2030 lifecycle fund. Figure 6 shows October 2019 allocations for four of the TSP's currently available lifecycle funds.[51]

51 We do not show the L 2020 lifecycle fund because its allocations are very similar to those of the L Income Fund.

Figure 6. Allocations of TSP Lifecycle Funds

Asset Class	Benchmark	Included in Segal Six Portfolios	L Income	L 2030	L 2040	L 2050
Government Securities	Nonmarketable short-term US Treasuries	No	73%	32.9%	20.6%	10.5%
Fixed Income	Barclays Aggregate Bond Index	Yes	6%	7.0%	7.6%	7.7%
Common Stock	S&P 500 Index	Yes	11%	30.5%	35.9%	40.1%
Small Cap Stock	Dow Jones US Completion Total Stock Market Index	Yes	3%	8.6%	10.8%	13.1%
International Stock	MSCI EAFE	Yes	7%	21.0%	25.1%	28.6%
Total			100%	100%	100%	100%
Government Securities			73%	33%	21%	11%
Traditional Bonds			6%	7%	8%	8%
Equity			21%	60%	72%	82%
Expected Return			3.8%	5.4%	5.8%	6.1%
Risk			4.7%	10.4%	12.4%	14.2%

Source: Investment consultant (Segal).

The five TSP funds' asset classes are very similar to those in the three traditional allocations, which were designed to be low cost and "passive" in nature.[52] Fees for active-management are generally much higher than fees for passive-management. The three alternative portfolios included allocations to distinct asset classes not available to TSP investors, including private equity, real estate, and emerging markets debt and equity.

Among the six scenarios, the T1 allocation has 20 percent in equity and 80 percent in high quality fixed income investments. This closely resembles the TSP L Income lifecycle fund, which has 20 percent allocated to equity and the residual in fixed income.

A key difference between the L Income fund and T1 is the structure of the fixed income component. The L Income fund has a significant allocation to special-issue Treasuries (through the stable-value G fund) while T1 has a significant allocation to TIPS. Our investment consultant projects a slightly higher 20-year return for T1, 4.0 percent annually, versus the L Income's 3.8 percent per annum. The T1 portfolio also has higher risk (volatility), with the standard deviation of its returns at 5.8 percent versus the L Income's 4.7 percent. None of the allocations modeled for future contributions has any direct exposure to special-issue Treasuries, but the retirement plans would maintain exposure as benefit disbursements cause legacy assets held in Treasury to decline.

In Table 6, we compare the similar asset allocations of the T1 and L Income portfolios, and the T3 and L 2030 portfolios.[53] The T1 and L Income portfolios have similar expected returns, a limited difference in projected risks, and almost no difference between Sharpe ratios. Analysis of the T3 and L 2030 portfolios produces similar comparisons of returns, risks, and Sharpe ratios. The T2 portfolio's asset allocation was significantly different from the asset allocations of all Lifecycle funds.

52 Passive investment management involves efforts to mirror a market index (for example, the Standard & Poor's 500 stock index, or a bond fund, such as the Barclays Capital U.S. Aggregate Bond Index). Investment management is considered "active" when managers rely on research, analytics, and their own judgment and experience regarding the purchase and sale of assets.

53 The TSP's international equity benchmark includes only developed markets' equities, excluding equities in emerging markets.

Table 6. Diversified Portfolios Mapping to TSP Lifecycle Funds

	Asset Class	Current	T1	L Income	T3	L 2030
Fixed Income	Special Purpose Treasuries (G Fund)			73.0%		32.9%
	Special Purpose Treasuries (Postal Service)	100.0%				
	TIPS		60.0%		40.0%	
	Core Fixed Income		20.0%	6.0%		7.0%
	High Yield					
	Emerging Markets Debt					
Equity	US Equity		10.0%	14.0%	30.0%	39.1%
	Developed Equity (Unhedged)		8.0%	7.0%	24.0%	21.0%
	Emerging Markets Equity		2.0%		6.0%	
Alternatives	MACS					
	Private Equity					
	Real Estate					
	Sum	100.0%	100.0%	100.0%	100.0%	100.0%
Totals	% Fixed Income	100.0%	80.0%	79.0%	40.0%	40.0%
	% Equity		20.0%	21.0%	60.0%	60.0%
	% Alternatives					20.0%
Risks & Returns	Compound Return	2.5%	4.0%	3.8%	5.6%	5.4%
	Standard Deviation	0.5%	5.8%	4.7%	11.0%	10.4%
	Sharpe Ratio		0.31	0.32	0.35	0.34

Source: Investment consultant (Segal).

Postal Service retirement liabilities were underfunded by an estimated $119.3 billion at the end of FY 2019. Continuation of the current investment strategy risks increased underfunding at the end of FY 2038. However, investment of future retirement contributions in any of six diversified portfolios could increase investment income and reduce unfunded liabilities, as could investment in TSP Lifecycle funds. We recognize that investing employee and Postal Service future retirement contributions in a diversified portfolio of stocks, bonds, and other assets requires legislative change. Therefore, we are not making a recommendation regarding diversification of retirement investments. We continue to encourage management to work with Congress on this and other matters to address unfunded retirement liabilities.

Management's Comments

Management agreed with the findings and recommendation and will work with outside actuaries to identify questionable assumptions that overstate the liability. Management agreed to contact the OPM and discuss the appropriate assumptions to use for the RHB liability by May 29, 2020.

Management disagreed with the monetary impact, stating that it implies $4.2 billion would be available immediately, which is not the case. They stated that reducing the RHB liability would benefit the Postal Service by lowering the amortization requirement by approximately $205 million annually. Further, they stated the reduction may not immediately benefit the Postal Service because it defaulted on these amortization payments in the past years to protect its liquidity. Management also pointed out that the estimate is speculative as assumptions are subject to annual changes, and mortality rates may increase or decrease over time. Finally, management asserted that the most recent available data shows a multi-year increase in mortality rates reversed in 2019 and that mortality rates declined.

See Appendix B for management's comments in their entirety.

Evaluation of Management's Comments

The OIG considers management's comments responsive to the recommendation in the report. Regarding monetary impact, our calculation is in accordance with the Inspector General Act of 1978, as amended. It is meant to quantify the significance of the cumulative impact of the change to the RHB liability and is not meant to correlate directly to a reduction in Postal Service payments. While we agree that assumptions are subject to annual changes, the OPM's Board of Actuaries historically changed its demographic assumptions less frequently. For our best estimate of long-term mortality improvement, we relied on the expertise and independence of an actuarial firm. Finally, we acknowledge that available data showed that a multi-year increase in mortality rates stopped when life expectancy improved in 2018 (by 0.1 percent, or about one month). This improvement is generally consistent with our assumption that life expectancy will improve over the long-term, although the 2018 increase was too small to reverse the post-2014 decline.

The recommendation requires OIG concurrence before closure. Consequently, the OIG requests written confirmation when corrective actions are completed. The recommendation should not be closed in the Postal Service's follow-up tracking system until the OIG provides written confirmation that the recommendation can be closed.

Appendices

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Appendix A: Additional Information

Scope and Methodology

Our scope included Postal Service retirement liabilities and assets as of September 30, 2018. To accomplish our objective, we:

- Obtained actuarial and cash flow projections for CSRS and FERS from the OPM and Korn Ferry U.S. Government Consulting Services (Korn Ferry).
  - Actuarially projected the CSRS and FERS liabilities, starting with FY 2019, using the OPM's demographic assumptions and projections for wage growth, investment returns (discount rate) on Postal Service CSRS and FERS investments, and CPI inflation. Korn Ferry included in its calculation that payments past due as of the end of FY 2018 were amortized as part of the unfunded liability.
- Contracted with PRM to obtain actuarial and cash flow projections for RHB.
  - Actuarially projected the RHB Fund liability, starting with FY 2019, using the OPM's demographic assumptions, FY 2018 discount rate, and projections for health care premium inflation.
  - Actuarially projected the RHB Fund liability, starting with FY 2019, using PRM's mortality improvement assumptions, the OPM's other demographic assumptions, FY 2018 discount rate, and projections for health care premium inflation.
- Contracted with Segal for projections of Postal Service retirement assets and liabilities under variations in inflation and interest rates, and returns on various asset classes, for a total of seven different prospective portfolios (asset allocations), including the OPM-Treasury approach to managing investments (no change from past practice).
  - Analyzed projections of returns on Postal Service retirement assets and resultant projected investment balances and funding levels of CSRS, FERS, and RHB liabilities.
- Obtained a listing of investments, as of the end of FY 2018, for the government-wide CSRDF to determine the Postal Service's share of the CSRDF, and obtained a listing of investments for the RHB Fund.
- Reviewed the OPM and Treasury investment practices for the CSRDF and RHB Fund.
- Reviewed the Secretary of the Treasury's authority with respect to the investment of CSRDF and RHB Fund assets.

Our approach in this report is different from the approaches used in our 2017 *Retiree Funds Investment Strategies* white paper[54] and 2018 *Treasury Inflation-Protected Securities* audit report.[55] In the 2017 paper, we assumed that all retirement assets would be immediately transferred to private sector accounts, and future contributions and earnings would accumulate in them. In our 2018 report on TIPS, we assumed that assets as of the end of FY 2017 would be invested in fixed-rate Treasuries and TIPS within Treasury, and we did not simulate investment of future cash flows. In this report, we simulated diversified investment of only future cash flows, beginning in FY 2020.

We conducted this performance audit from July 2019 through March 2020 in accordance with generally accepted government auditing standards and included such tests of internal controls as we considered necessary under the circumstances. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our finding and conclusions based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We discussed our observations and conclusions with management on January 31, 2020, and included their comments where appropriate.

We did not perform tests of internal controls over the retirement programs or investments, as it was not our objective to provide assurance on the effectiveness of the related internal controls. Absence of internal controls testing did not

54 Report Number FT-WP-17-001.
55 Report Number FT-AR-19-003.

significantly affect our audit findings and conclusions. The scope of this audit was to identify options to reduce unfunded retirement liabilities for FY 2020 and beyond. We did not plan to consider, or report on, the reliability of the OPM's data; therefore, we did not assess the reliability of any computer-generated data for purposes of this report.

Prior Audit Coverage

Report Title	Objective	Report Number	Final Report Date	Monetary Impact
Foreign Posts' Retirement Asset Investments	Identify retirement asset investment options for the Postal Service for pension and RHB funds, as demonstrated in the practices of 11 foreign posts.	FT-WP-19-001	5/21/2019	None
Treasury Inflation-Protected Securities	Determine the impact of investing Postal Service retirement fund assets in TIPS.	FT-AR-19-003	11/26/2018	$2.7 billion
Postal Service Retiree Funds Investment Strategies	Determine alternatives to the current investment strategy of investing retirement assets by using a diversified portfolio to include bonds, equities, and alternative investments.	FT-WP-17-001	9/20/2017	None
Update for Measuring Pension and Retiree Health Benefits Liabilities	Update and assess the impact of changes in assumptions on Postal Service retirement liabilities, in order to evaluate the reason for the significant reduction in its pension funding position, and to update results produced through use of Postal Service specific assumptions.	FT-AR-17-007	5/2/2017	$6 billion
Considerations in Structuring Estimated Liabilities	Identify assumptions used to determine significant liability amounts and discuss the rationale behind identifying fair market value of real estate assets and the impact that could have on unfunded liabilities.	FT-WP-15-003	1/23/2015	None

Appendix B: Management's Comments

JOSEPH CORBETT
CHIEF FINANCIAL OFFICER
EXECUTIVE VICE PRESIDENT

UNITED STATES POSTAL SERVICE

February 28, 2020

LAZERICK POLAND
DIRECTOR, AUDIT OPERATIONS

SUBJECT: Options to Reduce Unfunded Liabilities (Report Number 19BG010FT000)

The Postal Service agrees with the report's conclusion that revisions to the mortality improvement assumptions used by the Office of Personnel Management (OPM) in calculating the actuarial liability for retiree health benefits (RHB) could lower the unfunded liability for RHB.

Recommendation 1:

We recommend the Chief Financial Officer and Executive Vice President work with the OPM to update the mortality improvement assumptions it uses to calculate the Postal Service's RHB liability.

Management Response/Action Plan:

We agree with the recommendation and will commence a further review, aided by outside actuaries, to identify any assumptions that are questionable and overstate our liability and should be updated. We will contact the OPM within 90 days to initiate a dialog regarding the appropriate assumptions to be used in calculating Postal Service retirement and RHB liabilities.

We disagree with the conclusion that there are $4.2 billion "Funds Put to Better Use." The $4.2 billion monetary impact estimate inappropriately implies that $4.2 billion would immediately be available to pay down other liabilities or fund Postal Service operations. This is not the case. Reducing the actuarial liability for RHB would benefit the Postal Service through a lower amortization requirement, which would be reduced by approximately $205 million annually. Even this reduction in the amortization payment may not immediately benefit the Postal Service, as the Postal Service has defaulted on these amortization payments in past years in order to insure sufficient liquidity is available to fund operations. And, importantly, the $4.2 billion estimate is very speculative as assumptions are subject to annual changes, and

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changes in mortality rates may increase or decrease over time. In fact, the most recent available data shows a multi-year increase in mortality rates reversed in 2019 and that mortality rates declined.

Target Implementation Date:

Management will initiate a dialog with the OPM by May 29, 2020.

Responsible Official:

Senior Vice President, Finance and Strategy

Joseph Corbett

cc: Manager, Corporate Audit Response Management

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