United States Army Nonappropriated Fund Employee Retirement Plan

Actuarial Valuation Report as of October 1, 2022

Produced by Cheiron

August 2023

TABLE OF CONTENTS

LETTER OF TRANSMITTAL

August 14, 2023

Ms. Anita Jannsen
Chief, NAF Personnel Services Division
U.S. Army Family and MWR Command
P.O. Box 340309
Fort Sam Houston, TX 78234

Dear Ms. Jannsen:

At your request, we have conducted our annual actuarial valuation of the United States Army Nonappropriated Fund Employee Retirement Plan as of October 1, 2022. The results of the valuation are contained in this report.

The purpose of this report is to present the annual actuarial valuation of the United States Army Nonappropriated Fund Employee Retirement Plan. This report is for the use of the United States Army Nonappropriated Fund Employee Retirement Plan and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable laws and regulations. Furthermore, as credentialed actuaries, we meet the Qualification Standards of the American Academy of Actuaries to render the opinion contained in this report. This report does not address any contractual or legal issues. We are not attorneys and our firm does not provide any legal services or advice.

This actuarial report was prepared exclusively for the United States Army Nonappropriated Fund Employee Retirement Plan for the purpose described herein. Other users of this actuarial report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Sincerely,

Kevin J. Woodrich, FSA, EA, MAAA
Principal Consulting Actuary

Alison Chafin, FSA, EA, MAAA
Consulting Actuary

Justin Runkel, ASA, EA, MAAA
Consulting Actuary

cc: Anne Bright

FOREWORD

Cheiron has performed the actuarial valuation of the United States Army Nonappropriated Fund Employee Retirement Plan ("Plan") as of October 1, 2022. The purpose of this report is to:

1) **Determine the actuarial contribution rate** for the October 1, 2023 to September 30, 2024 fiscal year.
2) **Measure and disclose**, as of the valuation date, the financial condition of the Plan.
3) **Indicate trends** in the financial progress of the Plan.
4) **Provide specific information** and documentation required by P.L. 95-595.

An actuarial valuation establishes and analyzes Plan assets and liabilities on a consistent basis and traces the progress of both from one year to the next. It includes measurement of the Plan's investment performance as well as an analysis of actuarial liability gains and losses.

Section I presents a summary containing our findings and discloses important trends experienced by the Plan in recent years, as well as a projection of the expected financial condition of the Plan in the future.

Section II assesses and discloses various actuarial risk measures of the Plan.

Section III contains various exhibits used in determining the financial condition of the Plan.

Section IV includes the required disclosures and specific information required by P.L. 95-595.

Within Section IV of this report is a summary of the Plan's membership at the valuation date, a summary of the major provisions of the Plan, and the actuarial methods and assumptions used in the valuation.

In preparing our report, we relied on information (some oral and some written) supplied by the Employee Benefits Office. This information includes, but is not limited to, the plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

Future valuation results may differ significantly from the current valuation due to such factors as the following: plan experience differing from that anticipated by the assumptions, changes in assumptions, and changes in plan provisions or applicable law.

SECTION I – SUMMARY

Comments

Despite the primary focus given each year on the most recently computed valuation results, it is important to remember that each valuation is merely a snapshot of the long-term progress of the Plan. It is more important to judge a current year's valuation results relative to historical trends and trends expected into the future.

In this section, we first discuss the current year's results in relation to trends of the Plan over the past fifteen years. For the fiscal year ending September 30, 2023 (FY 2023), employers are contributing to the Plan at the rate of 7.60% of payroll. For FY 2024, the cost of benefits being accumulated (Normal Cost) plus administrative expenses is 9.07% of payroll, which is net of the 2.00% employee contribution currently in effect. The FY 2024 actuarial employer contribution rate, which also includes a 15-year level amortization of the Unfunded Actuarial Liability (UAL), is 8.51% of payroll. Since the Plan was over 100% funded as of October 1, 2022, the FY 2024 actuarial contribution rate includes a credit (i.e., negative amortization) for the surplus.

The amounts and rates on the tables found in Exhibit IV-8 Tables 2A and 2B, respectively, reflect a 40-year amortization of the UAL. These results are not indicative of the Plan's funding goals but rather our understanding of the information required to be disclosed under P.L. 95-595. If this understanding is incorrect, these tables can be modified accordingly.

After looking at current and historical results, we show projections of the contribution rate and funding status. Please remember that these projections make certain assumptions about future experience regarding investment returns, salary increases, inflation, contribution levels, and participant behavior. We cannot know what will actually happen, but these projections should provide a better understanding of the Plan's dynamics. Future experience of the Plan, particularly the financial market performance, will greatly impact what future contributions are necessary.

Our long-term funding projections show that the funded ratio is expected to decrease over time if current employer and employee contribution rates remain constant and all actuarial assumptions are exactly realized, including earning 7.25% on the Market Value of Assets each year.

To illustrate the significant impact investment returns have on the financial health of the Plan, we also include projections that vary future annual investment returns.

SECTION I – SUMMARY

Recent Experience

The financial markets underperformed the assumed 7.25% rate of return for the fiscal year ending September 30, 2022. The actual return net of investment expenses on a Market Value basis was approximately -11.21%. The return on an Actuarial Value basis, which smooths recent market fluctuations, was approximately 6.60%. This return equated to an investment loss of $14.8 million on an actuarial basis.

On the liability side, the Plan experienced an actuarial loss of $98.3 million (approximately 4.19% of the total Actuarial Liability), which was attributable to the following sources:

a) salaries for actives increasing more than expected ($28.8 million loss) driven by:
   - the release of hiring freeze and pay freeze directives that were implemented at the onset of the COVID-19 global pandemic, causing the active population and total annual salaries of active members to revert back to pre-pandemic levels, and
   - a $15 per hour minimum wage that was implemented for federal employees effective January 2022,
b) active participants retiring, terminating, dying, and becoming disabled differently than assumed ($4.6 million loss),
c) the 5.9% cost of living adjustment awarded April 1, 2022, which was higher than the assumed 3.25% increase ($23.5 million loss),
d) inactive participant experience (i.e., mortality, $7.5 million loss),
e) experience for participants due an account balance ($1.5 million loss),
f) benefit payments costing more than expected ($0.3 million loss),
g) heightened administrative expenses costing more than expected, due mostly to the data system conversion ($5.3 million loss),
h) new entrants entering the Plan ($8.4 million loss),
i) participants returning to work ($0.9 million loss), and
j) improvements in the census data provided for the actuarial valuation ($17.5 million loss).

The administrative expense assumption was reviewed concurrent with this valuation. Based on our analysis, a change in this assumption was adopted by the Board in July 2023. Further details on this assumption change is provided in Exhibit IV-10 later in this report.

The collective loss on investment and liability experience over the last year combined with continued recognition of past investment gains caused the Plan's funding ratio (Actuarial Value of Assets divided by Actuarial Liability) to decrease from 106.6% at October 1, 2021 to 101.7% at October 1, 2022. On a Market Value basis, the funded status decreased from 124.7% to 99.2% during this period.

Several types of liabilities are calculated and presented in this report. Note that these liabilities are not appropriate for settlement purposes, including the purchase of annuities and the payment of lump sums.

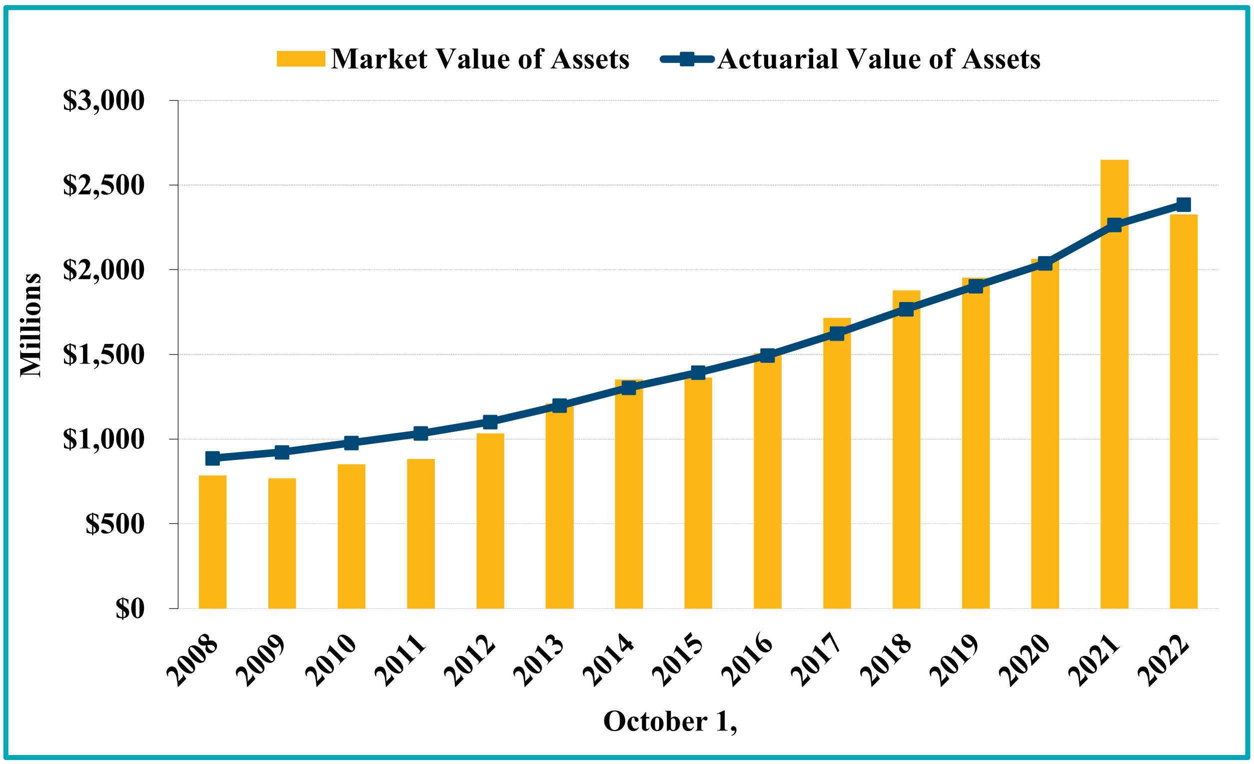
Trends

It is important to take a step back from these latest results and view them in the context of the Plan's recent history. In the following pages, we present a series of charts that display key factors of the valuations in previous years.

Growth in Assets

The following chart compares the Market Value of Assets (MVA) and the Actuarial Value of Assets (AVA). The AVA represents market values that have been "smoothed" based on actuarial methods to mitigate the effects of the volatility exhibited by the capital markets. The AVA is used to evaluate the Plan's ongoing unfunded liability (or surplus). Note how this actuarial technique has provided a smoother progression of assets over the last 15 years.

The MVA had increased annually after the 2008-2009 recession until 2022 where the Plan experienced a -11.2% return on a market value basis. On an actuarial value basis, the AVA continued its annual increases as the investment losses of 2022 were offset by investment gains in prior years. As of September 30, 2022, the AVA of $2,385 million is greater than the MVA of $2,326 million. This $59 million difference represents the net deferred investment loss that will be recognized in the AVA over the next few years.



SECTION I – SUMMARY

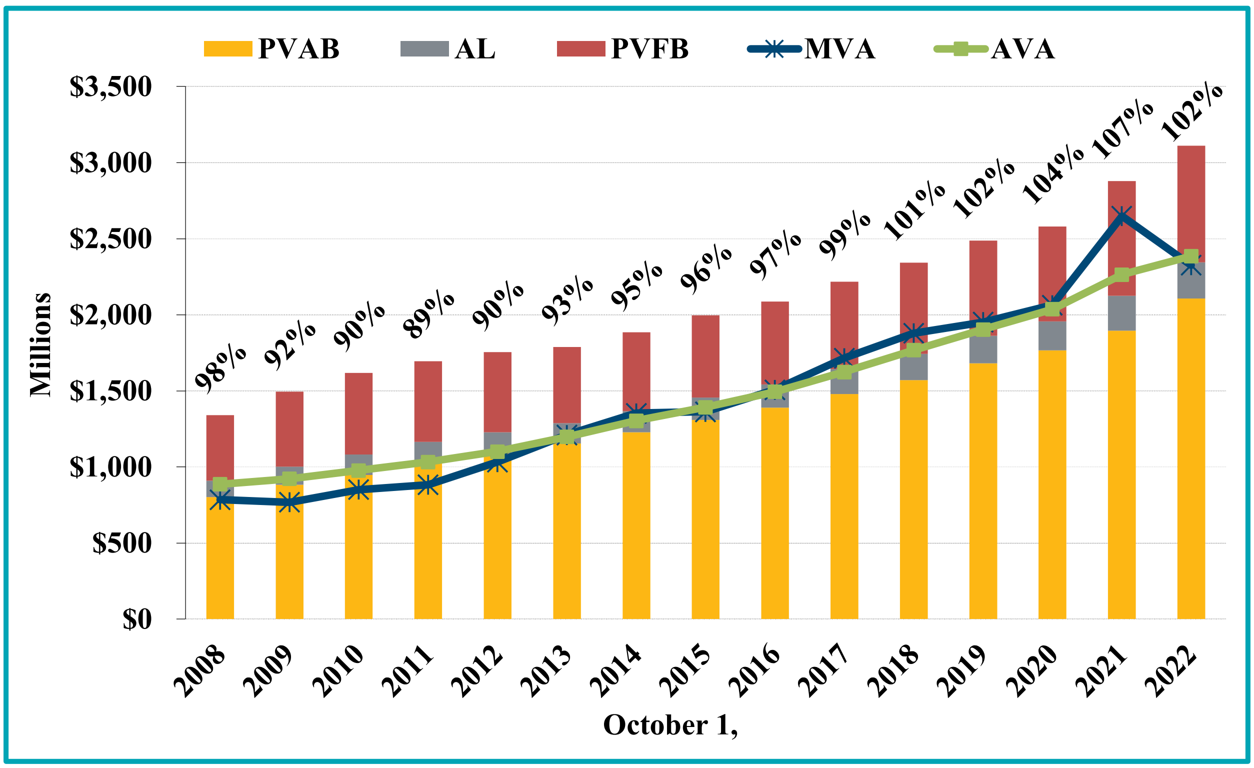
Assets and Liabilities

In the following chart, the three colored sections within each bar represent the three different measures of liability mentioned in this report. The amount represented by the top of the maroon bars, the Present Value of Future Benefits (PVFB), is the amount needed to provide all benefits for the current participants and their beneficiaries. If the Plan had assets equal to the PVFB, then future employer and employee contributions would not be required from the current members if all assumptions were realized. However, since contributions will continue to be made on a participant's behalf over their working career, it is not necessary to have assets near the PVFB.

Instead, the Actuarial Liability (AL), represented by the top of the gray bar, is the liability measure used for funding purposes. This measure represents the total amount of money needed to fully pay off future obligations of the Fund attributable to participants' past service. This also depends on all actuarial assumptions being met in the future.

The top of the yellow bar represents the present value of benefits that participants have accrued as of that date. This measure of liability is often referred to as the Present Value of Accumulated Benefits (PVAB).

For funding purposes, we compare the smoothed Actuarial Value of Assets (AVA), which is represented by the green line, to the AL in developing the funding ratio. These are the percentages shown in the graph labels. Finally, the Market Value of Assets (MVA) is represented by the blue line.



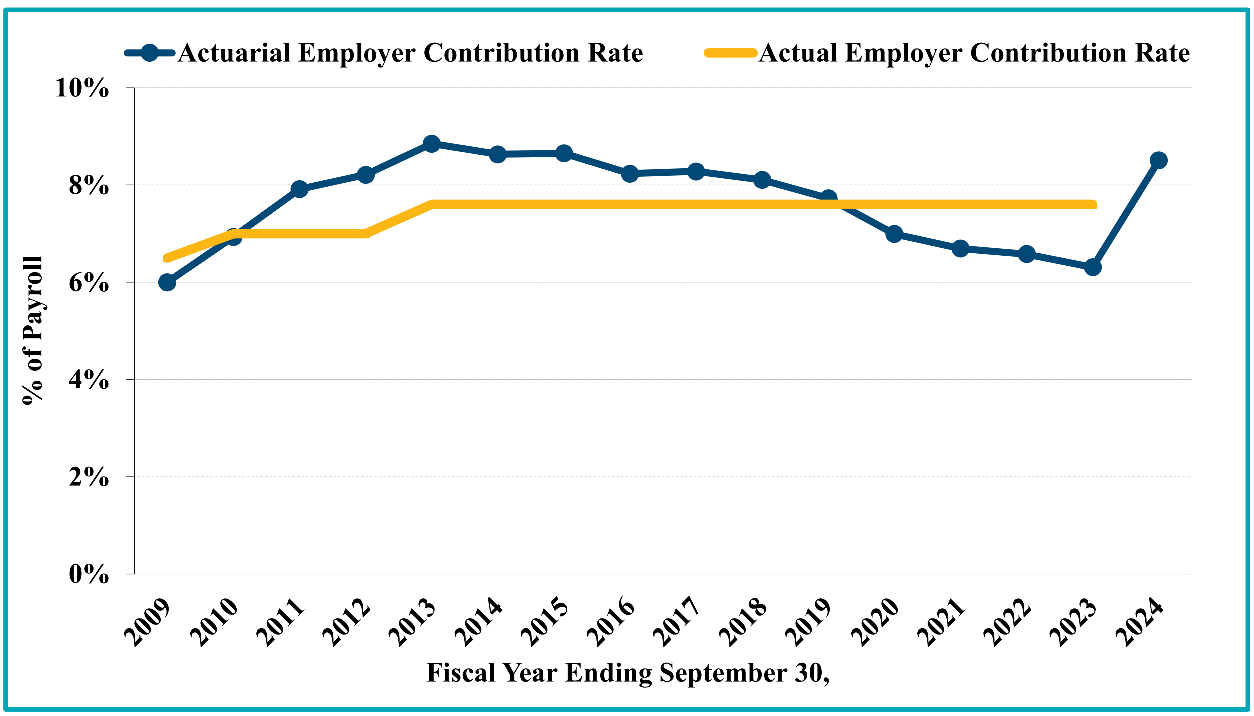
SECTION I – SUMMARY

Employer Contribution Rates

The following graph shows the actual employer contribution rate (yellow line) compared to the actuarially calculated employer contribution rate (blue line), each denominated as a percent of payroll. The actuarially calculated employer contribution rate is comprised of the employer Normal Cost, assumed administrative expenses and a 15-year level amortization of any unfunded liability (or surplus). The 15-year level amortization is a rolling amortization. As this approach will not fully amortize the unfunded (or surplus) Actuarial Liability, the actuarially calculated employer contribution rate should not necessarily be construed as a recommended contribution level.

The actuarially calculated employer contribution rate increased from 6.31% for FY 2023 to 8.51% for FY 2024. The change in the administrative expense assumption attributed to 0.8% of this increase, and the remaining increase is due to the investment loss on an actuarial basis and large liability loss due to experience differing from our assumptions, especially wages and COLA.

It is important to note that the current employer contribution policy of 7.60% is less than the employer Normal Cost and assumed administrative expenses equaling 9.07% of pay, which is net of the current employee contribution rate of 2.00% of pay. When contributions are not sufficient to cover the cost of benefit accruals earned during the year, administrative expenses, and interest on the unfunded liability (none currently as there is a surplus), then the unfunded liability will grow. This is illustrated in the projections shown later in this report.



SECTION I – SUMMARY

Valuation Results

The following table provides a summary of the results from the October 1, 2022 actuarial valuation. Presented alongside the current year results are results from the prior valuation at October 1, 2021.

Exhibit I-1
Summary of Principal Results
($ in millions)

		October 1, 2022	October 1, 2021	% Change
Participant Data				
(a)	Retired Members and Beneficiaries*	9,647	8,988	7.3%
(b)	Vested Deferred Members	5,448	4,827	12.9%
(c)	Non-Vested Participants Due Account Balance	28,882	27,633	4.5%
(d)	Active Members	17,035	16,084	5.9%
(e)	Total Participants	61,012	57,532	6.0%
(f)	Annual Salaries of Active Members	$ 773.6	$ 734.4	5.3%
(g)	Annual Retirement Allowances for Retired Members and Beneficiaries	$ 100.6	$ 85.6	17.5%
Assets and Liabilities				
(h)	Present Value of Future Benefits	$ 3,110.4	$ 2,879.1	8.0%
(i)	Actuarial Liability	$ 2,344.6	$ 2,124.2	10.4%
(j)	Actuarial Value of Assets	$ 2,385.4	$ 2,264.2	5.4%
(k)	Unfunded Actuarial Liability [(i) - (j)]	$ (40.8)	$ (140.0)	
(l)	Funding Ratio on Actuarial Basis [(j) ÷ (i)]	101.7%	106.6%	(4.9%)
(m)	Market Value of Assets	$ 2,326.4	$ 2,649.1	(12.2%)
(n)	Funding Ratio on Market Basis [(m) ÷ (i)]	99.2%	124.7%	(25.5%)
(o)	Present Value of Accumulated Plan Benefits	$ 2,106.5	$ 1,894.5	11.2%
Contribution Results		Fiscal Year End September 30, 2024	Fiscal Year End September 30, 2023	
(p)	Total Annual Normal Cost with Expenses	$ 82.7	$ 73.5	12.5%
(q)	Expected Employee Contributions	(15.5)	(14.7)	5.4%
(r)	UAL Amortization	(4.2)	(14.6)	(71.2%)
(s)	Interest to Middle of Year	2.8	2.1	33.3%
(t)	Actuarial Contribution	$ 65.8	$ 46.3	42.1%
(u)	As a % of Payroll [(t) ÷ (f)]	8.51%	6.31%	2.20%

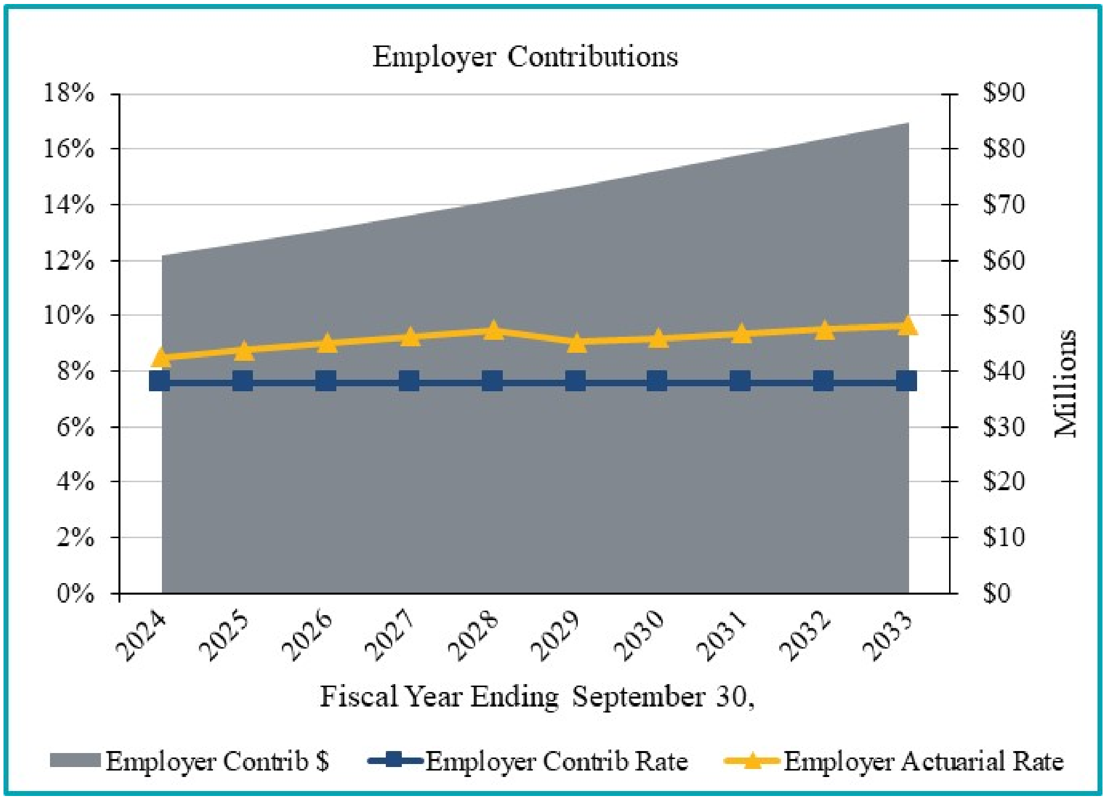
* Includes 15 participants receiving benefits from Ameritas Life Insurance Corporation as of 10/1/2021 and 9 as of 10/1/2022. Cost of living increases granted after 1980 for these 9 participants total $32,325 per year with an Actuarial Liability of $103,110 as of 10/1/2022. The Actuarial Liability for these increases is included above.

Future Outlook

The two charts that follow show the expected progress of the Plan over the next ten years assuming Plan assets earn the assumed 7.25% on their market value.

In the chart below, the gray shaded area represents the anticipated dollar amount (aligned with the amounts on the right axis) contributed by the employer at 7.60% of payroll. The employer contribution rate is shown by the blue line, and the employer actuarial rate is shown by the yellow line (aligned with the percentages on the left axis).

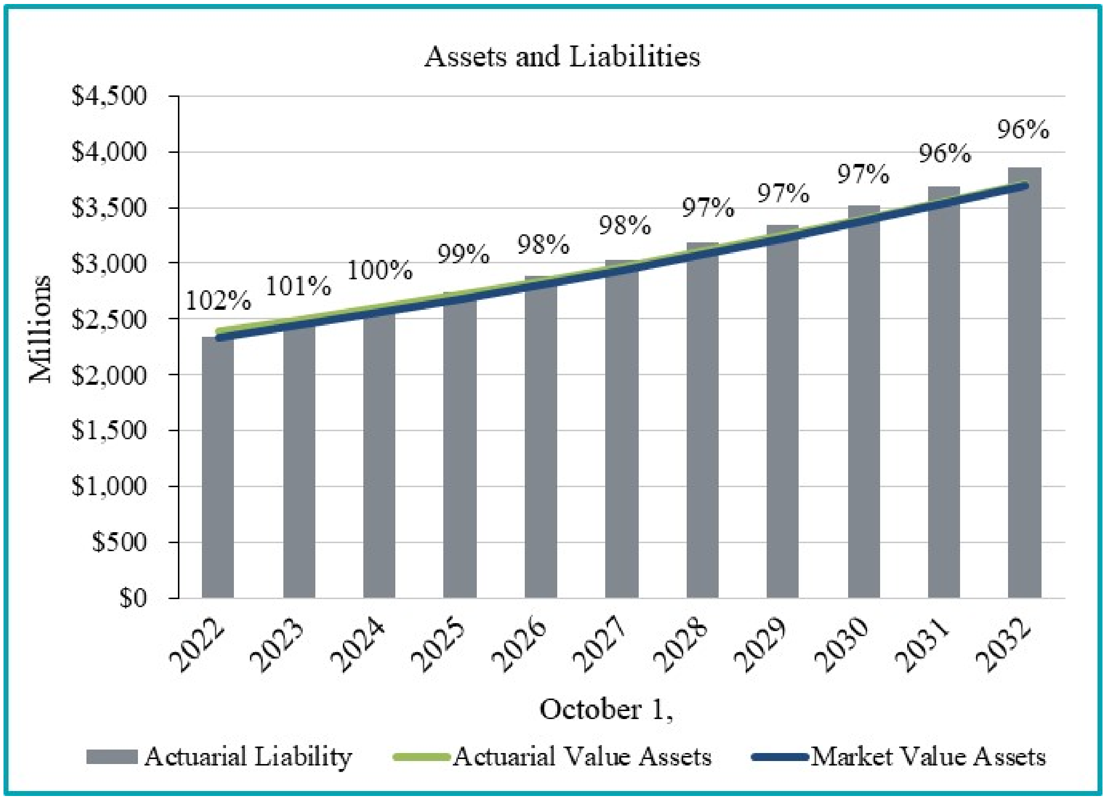
If all actuarial assumptions are met and current contribution rates remain unchanged, including the 2.0% employee contribution rate, the employer actuarial rate is expected increase gradually over the period from 8.51% for FY 2024 to 9.66% for FY 2033 as contributions are not sufficient to cover the actuarial rate.



Projected contributions do not reflect any additional employer contributions from other sources such as portability and DSR income or service buybacks. These additional contributions are intended to offset the additional liabilities that would be recognized as these events occur.

SECTION I – SUMMARY

The following chart entitled Assets and Liabilities shows the projected funding status. Over the next decade, the Plan is projected to decrease from 102% funded to 96% funded on an actuarial value basis. This trend is based on continued employer and employee contributions at 7.60% and 2.00% of payroll, respectively. This chart shows the growth in the unfunded liability when contributions are not sufficient to cover the actuarial rate.



It is very important to note that these projections, while valid as baseline projections, **are not going to occur** as experience never conforms exactly to assumptions from year to year. In Section II, *Disclosures Related to Risk*, we stress test the underlying investment return assumption by varying future returns to demonstrate the impact this particular assumption has on the overall health of the Plan.

SECTION II – DISCLOSURES RELATED TO RISK

Introduction

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. These assumptions represent a reasonable estimate of future experience, but actual future experience will undoubtedly be different and may be significantly different. This section of the report is intended to identify the primary risks to the Plan, provide some background information about those risks, and provide an assessment of those risks.

Identification of Risks

The fundamental risk to the System is that the contributions needed to pay the benefits become unaffordable. For pension plans, the three primary valuation results that can significantly differ from those expected are in the assets, liabilities, and contributions. While there are several factors that could lead to these results being different, we believe the primary risks to this Plan are:

- Investment risk,
- Longevity and other demographic risks,
- Plan change risk,
- Contribution risk, and
- Assumption change risk.

Other risks that we have not identified may also turn out to be important.

Investment Risk is the potential for investment returns to deviate from what is expected. When actual investment returns are lower than the investment assumption used in the actuarial valuation (currently 7.25% per year), the unfunded liability will increase and the period of time over which the unfunded liability is expected to be paid will increase. Conversely, when actual returns exceed the assumption, the resulting unfunded liability measurements and amortization period will be lower than anticipated.

Longevity and Other Demographic Risk is the potential for mortality or other demographic experience to be different than expected. Generally, these risks emerge slowly over time as the actual experience deviates from what was expected. In addition, the extensive number of assumptions related to longevity and demographic experience often result in offsetting factors contributing to the Plan's overall liability experience.

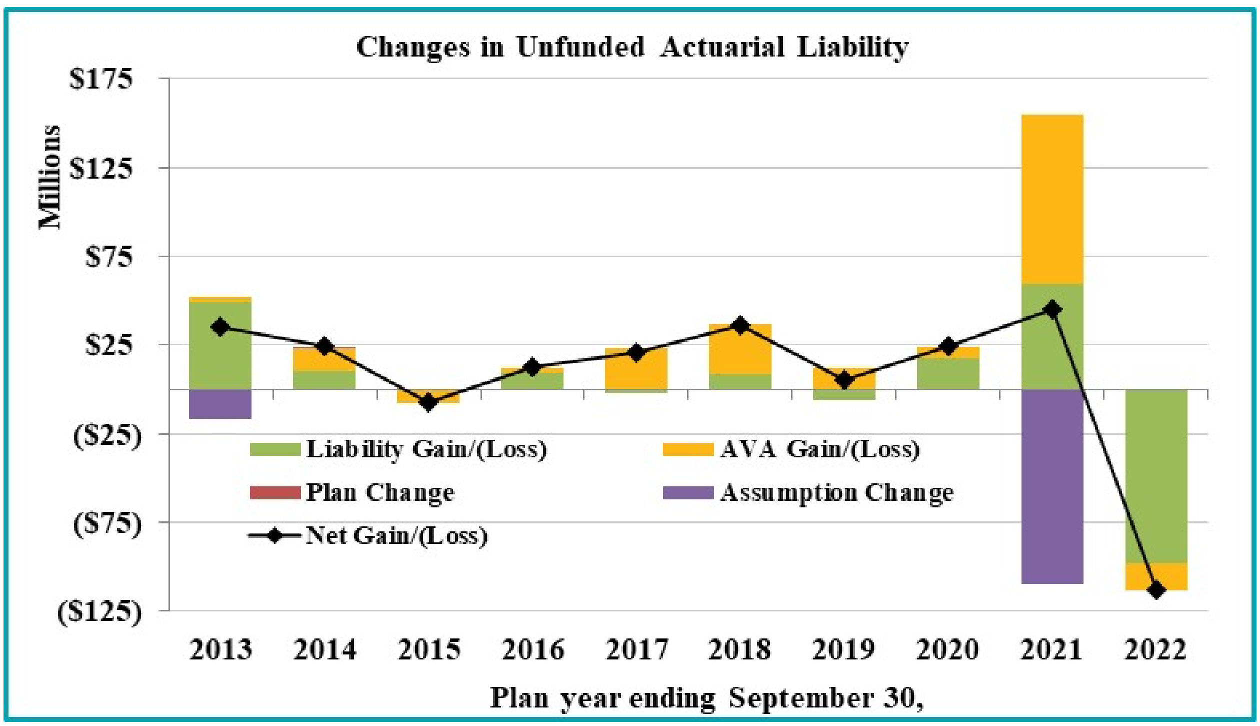
Plan Change Risk is the potential for the provisions of the Plan to be changed such that the funding or benefits are changed materially. In addition to the actual payments to and from the Plan being changed, future valuation measurements can also be impacted, with plan changes leading to deviations between actual future measurements and those expected by the current valuation.

SECTION II – DISCLOSURES RELATED TO RISK

Contribution Risk is the potential for actual future contributions to deviate from those that are expected, or that the anticipated contributions will be inadequate to fund the plan benefits. There are different sources of contribution risk ranging from the sponsor a contribution level that does not adequately fund the Plan to material changes in the contribution base (e.g., covered employees, covered payroll, sponsor revenue) that affect the amount of contributions the Plan can collect.

Assumption Change Risk is the potential for the environment to change such that future valuation assumptions are adjusted to be different than the current assumptions. For example, declines in interest rates over time may result in a change in the assumed rates of return used in the valuation. A healthier workforce may result in changes in employee behavior such that retirement rates are adjusted to reflect employees working longer. Assumption change risk is an extension of the risks previously identified, but rather than capturing the risk as it is experienced, it captures the cost of recognizing a change in the environment when the current assumption is no longer reasonable. The chart below illustrates the impact of the Plan's assumption changes over the past ten valuations.

In understanding the impact of some of these risks, it is useful to look at past experience deviations. These deviations are commonly referred to as actuarial gains and losses. The following graph shows the components of changes in the Unfunded Actuarial Liability (UAL) for the last ten years, including liability gains/(losses), investment gains/(losses) on the Actuarial Value of Assets, plan changes, and assumption changes. The net UAL change represents the sum of each of these components and is shown by the dark line.



SECTION II – DISCLOSURES RELATED TO RISK

As described previously and evident in this chart, investment gains/(losses), liability gains/(losses), and assumption changes have been key risks for the Plan.

Actuarial liability gains/(losses), as shown by the green bars, have historically been driven by salaries and annual cost of living adjustments differing from their respective underlying assumptions. Over the past ten years, the Plan has experienced net gains, effectively reducing the UAL during this time. Whereas there was a sizeable loss this year, this was only one of two years during the period that had a net loss to the Plan.

Investment gains/(losses) on an actuarial, or smoothed, basis, as shown by the gold bars, have been an impactful source of change. The amount of these investment gains/(losses) can vary significantly from year to year as they are subject to volatility from the financial markets.

Assumption changes, represented by the purple bars, consist of changes to economic and demographic assumptions. These changes can have a significant impact on the Plan.

- Concurrent with the 2021 valuation, changes to the economic assumptions resulted in a \$128 million increase in liabilities. In contrast, demographic assumption changes reduced liabilities by \$18 million.

  This discrepancy shows how economic assumption changes tend to drive changes in the UAL more than demographic assumption changes. This also illustrates the potential for offsetting effects that can arise when assumption changes are made.

- Another example of assumption changes offsetting one another is seen in 2014, where changes to the economic assumptions increased the UAL by just \$7 million. This was due to the real rate of return, or the amount the discount rate exceeds the general inflation assumption, remaining level as the discount rate, general wage increase, and general inflation assumptions were each reduced by 0.50%.

  Conversely, the economic assumption changes in 2021 had a compounding impact as the real rate of return decreased from 4.50% to 4.00% due to lowering the discount rate from 7.50% to 7.25% while increasing both the general wage increase and inflation assumptions to 3.25% and 3.75%, respectively.

SECTION II – DISCLOSURES RELATED TO RISK

Plan Maturity Measures

As pension plans become more mature, the identified risks become of more significant concern. As a result, it has become increasingly important to examine measures that indicate a pension plan's maturity level. The balance of this section discloses and examines three maturity measures: the asset leverage ratio, the support ratio, and the net cash flow ratio.

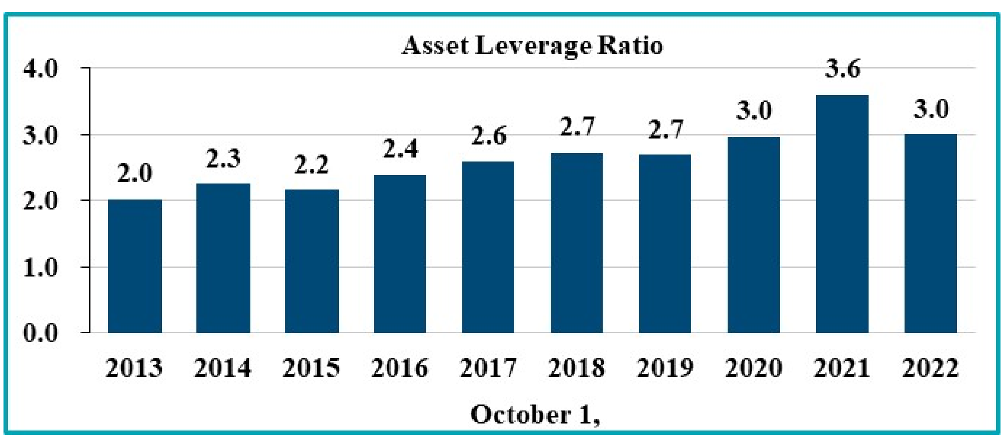
Asset Leverage Ratio

Typically, one of the most important pension plan maturity measures is the asset leverage ratio — the Market Value of Assets divided by the Plan's payroll. The greater the plan's assets are relative to payroll, the more vulnerable the plan is to investment volatility. The following example demonstrates this.

($ in millions)		
	Plan A	**Plan B**
Plan Assets	$ 5,000	$ 5,000
Payroll	$ 500	$ 1,000
Asset Leverage Ratio	10.0	5.0
10% Investment Loss	$ 500	$ 500

This example shows two plans that both experience a 10% investment loss equaling $500 million. Although their assets are the same, because the size of payroll for Plan A is half of that of Plan B, its asset leverage ratio is 10 and Plan B's ratio is 5. This means that Plan A has to make up (i.e., amortize) that loss over a payroll that is half as large as Plan B's.

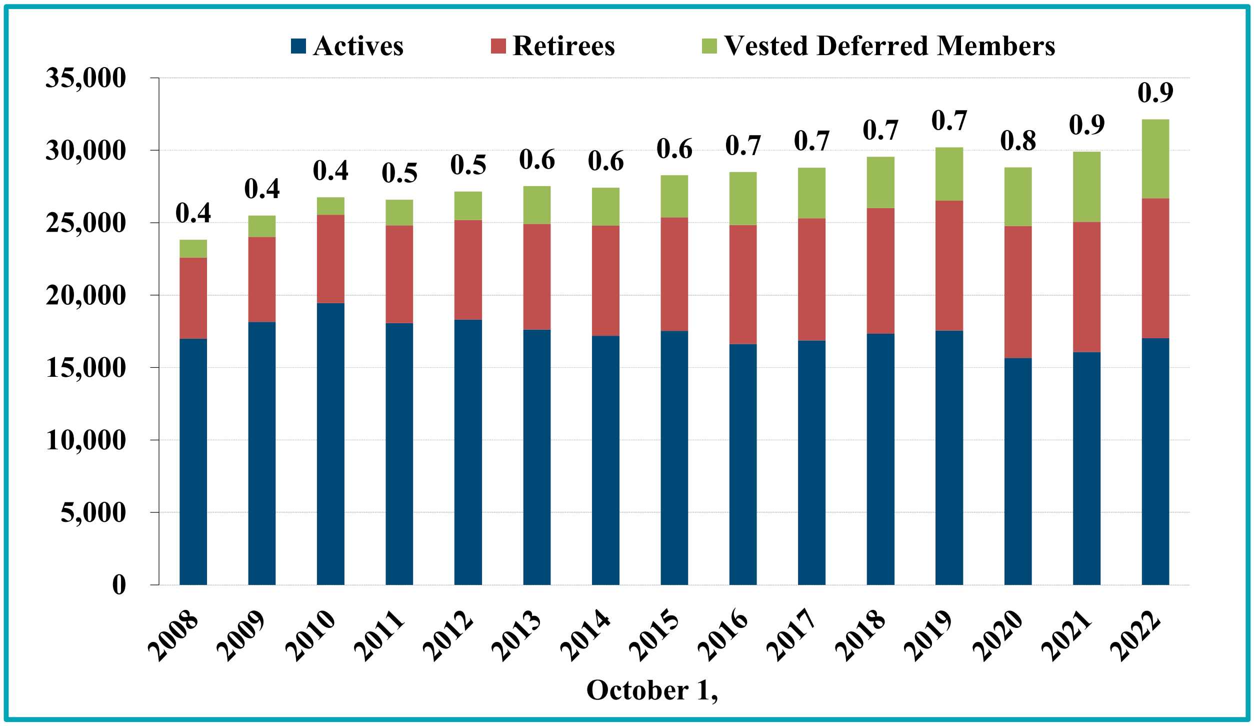
The following chart shows that the Plan's Asset Leverage ratio has increased since 2013, growing from a ratio of 2.0 to a ratio of 3.0. This means that the impact of a major economic downturn would be much greater than the impact it was a decade ago, presenting additional challenges when trying to make up for the lost investment income through additional contributions.



SECTION II – DISCLOSURES RELATED TO RISK

Support Ratio

A commonly used measure of plan maturity is the Support Ratio, the ratio of inactive members (those receiving benefits or entitled to a deferred benefit) to the number of active members (those currently accruing benefits in the Plan). The greater this ratio, the more likely that the Plan will develop negative cash flows. Since contributions are only made on behalf of active members, adverse investment performance places a relatively heavier burden on active members to recover via future contributions. We continue to monitor the support ratio as a means of reflecting the relative risks the Plan has to investment volatility.



In the preceding chart, the numbers above the bars represent the support ratio for the Plan. This ratio has increased gradually over the past 15 years but has not yet reached 1.0, meaning there are still more active participants than inactive participants. Growth in this ratio over time is to be expected as the Plan matures. The drop in participants in 2020 was a direct result of the 10% decrease in the number of actives due to a hiring freeze at the onset of the COVID-19 global pandemic. Recovery from the pandemic has led to an increase in actives for both 2021 and 2022.

Boston College's Center for Retirement Research, NASRA and the Center for State and Local Government Excellence maintain the Public Plan Database that contains the majority of state plans as well as many large municipal plans. The median support ratio for the plans within this database has been just over 1.0 in recent years. Therefore, the Plan's support ratio of 0.9 suggests that this Plan is still less mature than most plans in the database.

In addition to the participants shown in this chart, there are 28,882 participants who are no longer working but are entitled to a refund of their employee contribution account balance.

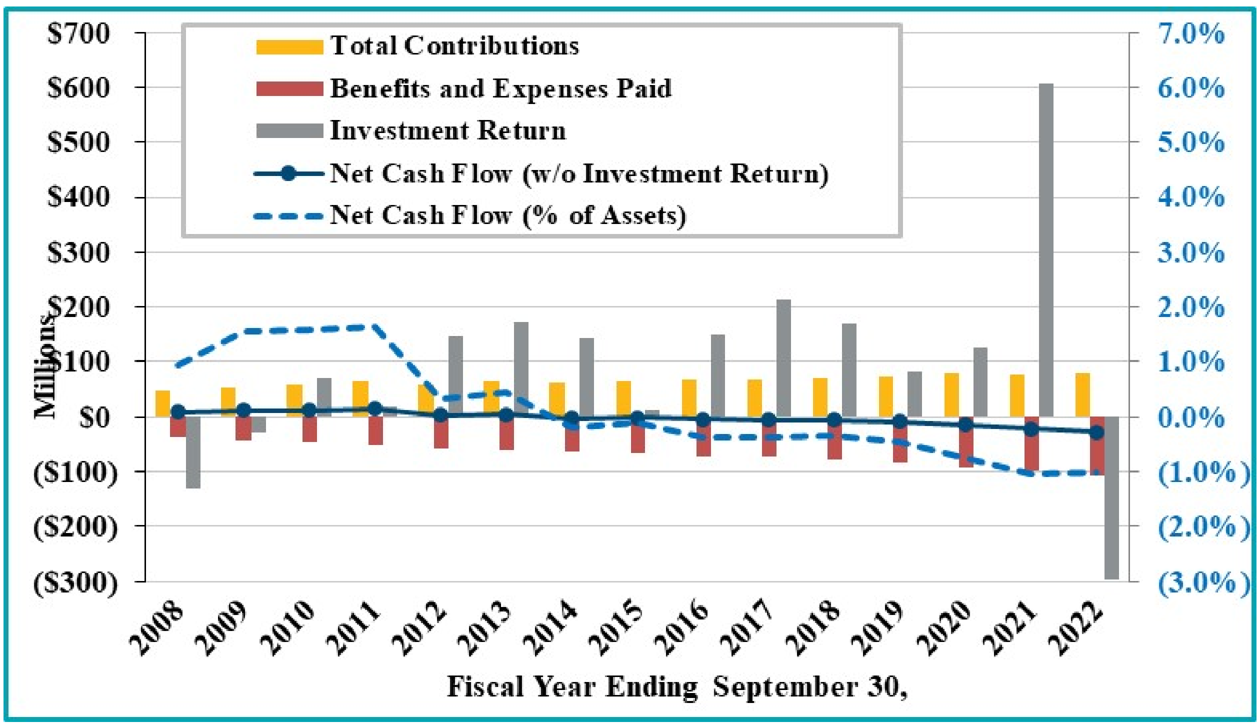
SECTION II – DISCLOSURES RELATED TO RISK

Net Cash Flow

Another and more important measure of plan maturity is the ratio of the net cash flow (contributions less benefits and expenses) to the market value of plan assets. With shrinking workforces, aging Baby Boomers, and retirees living longer, most plans pay out more in benefits and expenses than they receive in contributions each year, leading to negative net cash flow.

Plans with significant negative cash flows are more vulnerable to market declines. A plan that is in a negative cash flow position must rely on investment returns at least as much as the negative cash flow in order for the assets to increase. However, negative cash flows are expected with maturing plans, and a plan's asset allocation may be adjusted to minimize sensitivity to investment risk.

The following graph shows the Plan's historical cash flows – employer, member, and other contributions (gold bars) compared to the benefit payments and administrative expenses (maroon bars). The Plan experienced a positive cash flow prior to 2014. However, the Plan has since reflected a negative cash flow position, as shown by the solid blue line on a dollar basis and dashed blue line as a percentage of the Market Value of Assets. The negative cash flow of $27.2 million for the period ending September 30, 2022 amounted to 1.0% of assets. The -11.21% investment return was below this threshold, causing the market value of assets to decrease from last year.



SECTION II – DISCLOSURES RELATED TO RISK

Assessment of Future Risks

Stress Testing the Plan's Funded Status and Contribution Levels

The fundamental risk to the Plan is that contributions will not adequately fund Plan benefits. In assessing this risk, we performed stress tests on the Plan's funded status and contribution level by varying future investment returns. It is imperative to note that the baseline projections shown in Section I, while valid as an illustration of the Plan's sensitivity to future investment returns, **will not occur** as experience never conforms exactly to assumptions from year to year.

With varying annual investment earnings, the charts that follow show the volatility in the contributions (top graph) and in the Plan's funded status (bottom graph). Note that these graphs reflect illustrative scenarios and are not intended to reflect future expectations.

The first two illustrative scenarios show what the coming decade would look like if the Plan's investment returns were to mirror two different periods in history – one associated with a bull market (mimicking investment performance from 1950 to 1959) and the other reflecting a bear market (mimicking 1931 to 1940). The investment returns for these two periods average 12.35% and 3.31%, respectively, which are very different from the assumed investment return of 7.25%. A third scenario shows a 10-year period averaging close to 7.25% annually but with much more volatility than the baseline scenario.

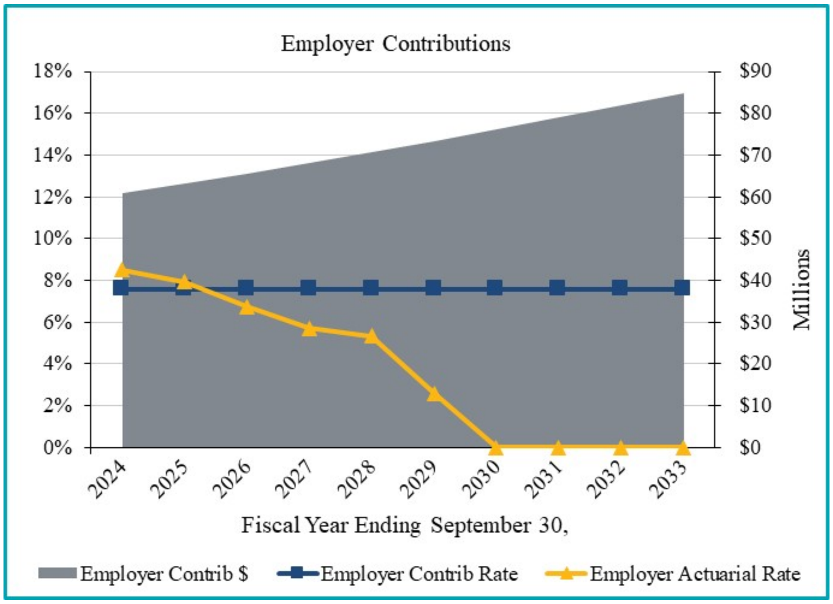
What these charts show is that whether the Plan is fully funded or poorly funded, future investment returns can quickly alter the financial position of the Plan. It is impossible to judge the financial soundness of a plan with a single-year measurement. What is more important to consider is the Plan's conservatism in funding benefits, as well as the discipline and ability for the Plan to consistently contribute an adequate amount.

SECTION II – DISCLOSURES RELATED TO RISK

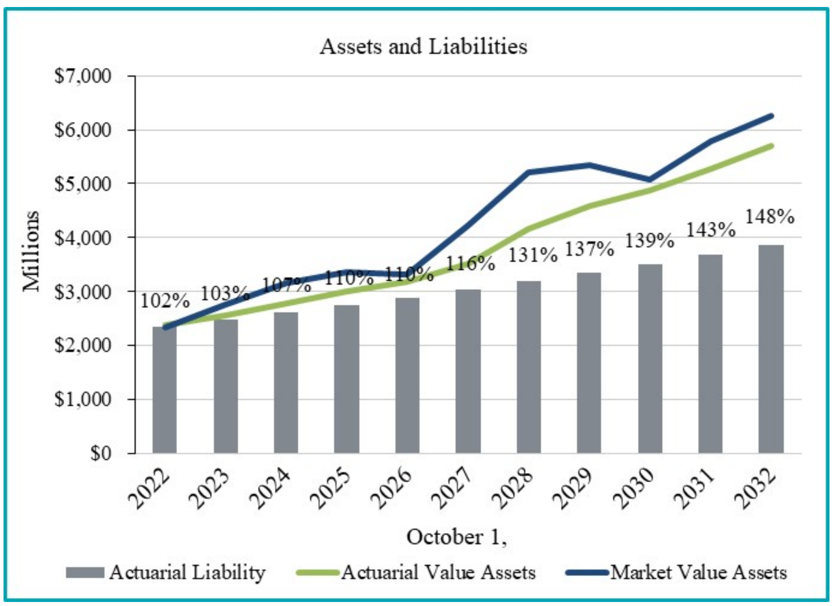
Assuming Investment Returns for Next 10 Years Follows 1950 – 1959 (Bull Market)

The chart below demonstrates how the funded status could change if investment returns were to mirror 1950 – 1959, a period of a bull market, based on a portfolio invested 60% in equities and 40% in fixed income. The returns during this period would be as follows:

PYE 9/30 As If	2023 1950	2024 1951	2025 1952	2026 1953	2027 1954	2028 1955	2029 1956	2030 1957	2031 1958	2032 1959	Avg for Period
Return	21.13%	16.86%	7.83%	0.71%	30.79%	24.74%	3.74%	-3.50%	16.21%	9.82%	12.35%



Under this scenario, the favorable investment returns and continued employer contribution rate of 7.60% would result in the employer actuarial contribution rate going to 0% and the Plan's projected funded status increasing to 148% by the end of the period shown.

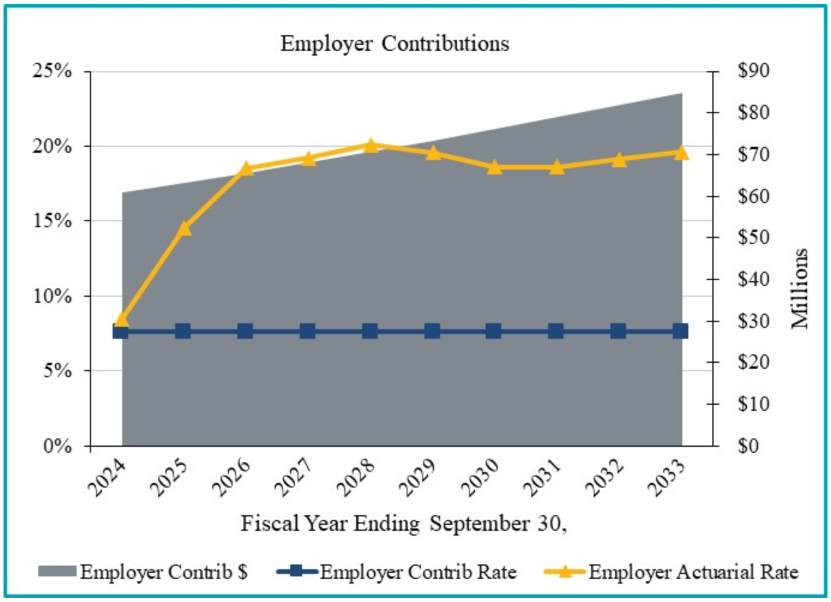


SECTION II – DISCLOSURES RELATED TO RISK

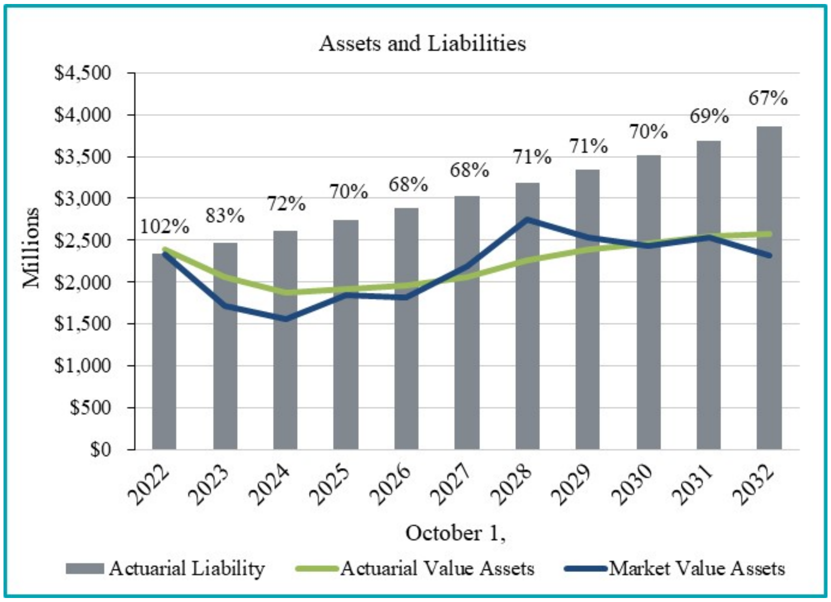
Assuming Investment Returns for Next 10 Years Follows 1931 – 1940 (Bear Market)

The chart below demonstrates how the funded status could change if investment returns were to mirror 1931 – 1940, a period of a bear market, based on a portfolio invested 60% in equities and 40% in fixed income. The returns during this period would be as follows:

PYE 9/30 As If	2023 1931	2024 1932	2025 1933	2026 1934	2027 1935	2028 1936	2029 1937	2030 1938	2031 1939	2032 1940	Avg for Period
Return	-24.25%	-6.20%	22.79%	2.35%	24.65%	29.50%	-5.14%	-0.98%	7.83%	-5.18%	3.31%



Under this scenario, the unfavorable investment returns along with the continued employer contribution rate of 7.60% would result in a significant increase to the employer actuarial contribution rate and the Plan's projected funded status decreasing to 67% by the end of the period shown, as contributions would not be sufficient to fund the liability.

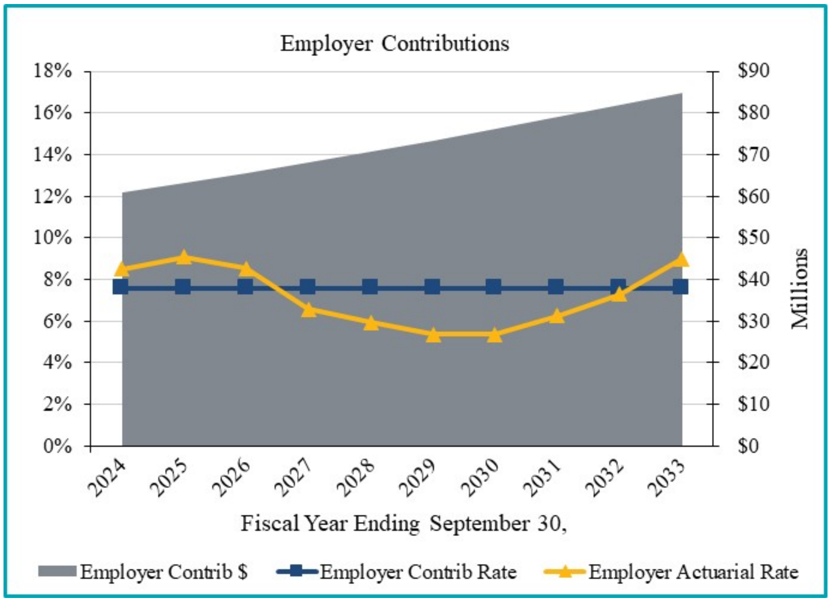


SECTION II – DISCLOSURES RELATED TO RISK

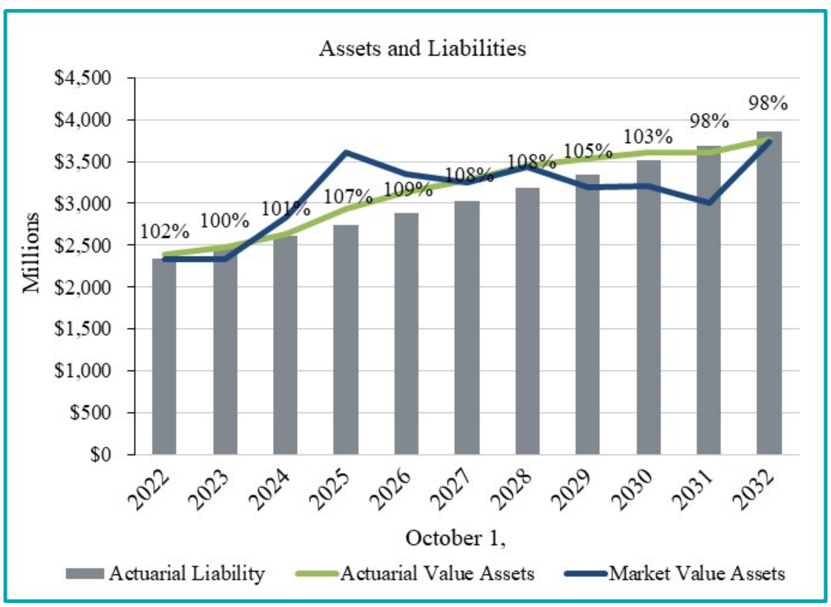
Assuming Investment Returns for Next 10 Years Averages 7.29% Annually

The chart below demonstrates how the funded status could change if investment returns were to mirror 1934 – 1943, a period where the average investment return was similar to the current assumption of 7.25%, based on a portfolio invested 60% in equities and 40% in fixed income. The returns during this period would be as follows:

PYE 9/30 As If	2023 1934	2024 1935	2025 1936	2026 1937	2027 1938	2028 1939	2029 1940	2030 1941	2031 1942	2032 1943	Avg for Period
Return	2.35%	24.65%	29.50%	-5.14%	-0.98%	7.83%	-5.18%	3.22%	-3.49%	27.82%	7.29%



Under this scenario, the investment returns along with the continued employer contribution rate of 7.60% would result in the employer actuarial contribution rate going to 9% and the Plan's projected funded status decreasing to 98% by the end of the period shown. Even though the average return for this period is nearly the assumed rate of 7.25%, the funded status and employer contributions experience much more volatility than the baseline scenario.



SECTION II – DISCLOSURES RELATED TO RISK

The Plan, by order of the Commanding General, may increase the employee contribution rate of 2.00% if the funded status is projected to fall below 90% within the following 20 years. If the employee contribution were to increase, the employer contribution would increase as well. The bear market scenario projects the funded status to fall below the 90% threshold. Since these projections are provided for illustrative purposes only, we have assumed that the employee and employer contribution rates remain at 2.00% and 7.60%, respectively. However, if the Commanding General were to order contribution rate increases, the funded percentage would be higher than shown in these projections.

To reiterate, the previous scenarios illustrate not only the importance of the investment returns themselves but also the timing of the returns over the period.

SECTION III – STATUTORY VALUATION EXHIBITS

Exhibit III-1
Development of Actuarial Value of Assets

1.	Actuarial Value of Assets as of October 1, 2021	$	2,264,182,834
2.	Amount in (1) with interest of 7.25% to September 30, 2022		2,428,336,089
3.	Contributions (Employer, Employee, and Other) for Plan Year ended September 30, 2022		79,635,571
4.	Interest on Contributions assuming payments made uniformly throughout the year to September 30, 2022		2,836,281
5.	Disbursements from Trust except investment expenses, October 1, 2021 through September 30, 2022		106,853,577
6.	Interest on disbursements made uniformly throughout the year to September 30, 2022 at 7.25% per year		3,805,671
7.	Expected Actuarial Value of Assets as of September 30, 2022 = (2) + (3) + (4) - (5) - (6)	$	2,400,148,693
8.	Actual Market Value of Assets at September 30, 2022	$	2,326,365,095
9.	Excess of (8) over (7)	$	(73,783,598)
10.	Pro-forma Actuarial Value of Assets at September 30, 2022 = (7) + 20% of (9)	$	2,385,391,973
11.	Maximum value = 1.20 x (8)	$	2,791,638,114
12.	Minimum value = 0.80 x (8)	$	1,861,092,076
13.	Actuarial Value of Assets as of September 30, 2022 = (10), but not more than (11) nor less than (12)	$	2,385,391,973

SECTION III – STATUTORY VALUATION EXHIBITS

Exhibit III-2
Employer Actuarial Rate

1.	Actuarial Liability	$ 2,344,641,601
2.	Actuarial Value of Assets	2,385,391,973
3.	Unfunded Actuarial Liability [(1) - (2)]	$ (40,750,372)
4.	Normal Cost	74,988,842
5.	Administrative Expenses as of Beginning of Year	7,724,873
6.	15-Year Amortization of Unfunded Actuarial Liability	(4,237,835)
7.	Estimated Employee Contribution	15,471,071
8.	Interest on (4), (5), (6) for Half Year *	2,794,978
9.	Net Employer Actuarial Contribution: (4) + (5) + (6) - (7) + (8)	$ 65,799,787
10.	Active Member Payroll	$ 773,553,551
11.	Employer Actuarial Rate as a Percentage of Active Member Payroll: (9) / (10)	8.51%

* Contributions are assumed to be made uniformly throughout the year.

SECTION III – STATUTORY VALUATION EXHIBITS

Exhibit III-3
Ten-Year Projection of Retirees

Plan Year Ending 9/30	Current Retirees*	From Deferreds	From Actives	Total Retirees	Annual Benefits**
2023	9,413	792	147	10,352	$ 117,879,142
2024	9,167	908	747	10,822	125,611,388
2025	8,912	1,024	1,295	11,231	133,614,525
2026	8,650	1,147	1,778	11,575	141,896,014
2027	8,381	1,286	2,201	11,868	150,573,636
2028	8,107	1,409	2,626	12,142	154,932,559
2029	7,828	1,530	2,989	12,347	164,359,560
2030	7,543	1,658	3,294	12,495	174,354,907
2031	7,254	1,772	3,528	12,554	184,369,035
2032	6,962	1,915	3,681	12,558	194,307,750

* Includes number of participants and their cost of living benefits to be paid from Ameritas Life Insurance Corporation.

** Assumes that the $22.6 million in account balances for the 28,882 non-vested participants due a refund of their employee contributions are paid uniformly over next five years.

The projection above is based on the October 1, 2022 census data provided and does not reflect any employees expected to be hired after that date.

SECTION III – STATUTORY VALUATION EXHIBITS

Exhibit III-4
Summary of Census Data as of October 1, 2022

A. ACTIVE PARTICIPANTS

1.	Number		17,035
2.	Total Annual Valuation Payroll (as reported)	$	773,553,551
3.	Average Age		44.9
4.	Average Credited Service		8.6
5.	Average Annual Pay [2. ÷ 1.]	$	45,410
6.	Average Accumulated Employee Contributions with Interest	$	8,582

B. INACTIVE PARTICIPANTS

7.	Terminated Vested Participants:		
	a. Number		5,448
	b. Total Monthly Benefit	$	1,785,009
	c. Average Monthly Benefit [7b. ÷ 7a.]	$	328
8.	Currently Retired Participants, Disableds and Beneficiaries (non-Ameritas):		
	a. Number		9,638
	b. Total Monthly Benefit	$	8,377,051
	c. Average Monthly Benefit [8b. ÷ 8a.]	$	869
9.	Participants receiving cost-of-living benefits from Ameritas Life Insurance Corporation:		
	a. Number		9
	b. Total Monthly Benefit	$	2,694
	c. Average Monthly Benefit [9b. ÷ 9a.]	$	299
10.	Non-Vested Participants due an Account Balance		
	a. Number		28,882
	b. Balance	$	22,616,605

SECTION III – STATUTORY VALUATION EXHIBITS

Exhibit III-5
Data Reconciliation from the Prior to the Current Valuation*

	Active Participants	Vested Deferred Members	Disability Retirements	Retirees	Beneficiaries	Total
October 1, 2021	16,084	4,827	255	7,644	1,089	29,899
New Hires	4,429	0	0	0	0	4,429
New Beneficiaries	0	0	0	0	136	136
Terminated without a Vested Benefit	(1,786)	0	0	0	0	(1,786)
Refunded	(233)	(92)	0	0	0	(325)
Deceased	(5)	(4)	(10)	(262)	(39)	(320)
Vested Termination	(1,173)	1,173	0	0	0	0
Rehired Inactives	168	(166)	(1)	(1)	0	0
Disablements	(2)	(5)	7	0	0	0
Retirements	(447)	(384)	0	831	0	0
Data adjustments	0	99	(1)	10	(11)	97
October 1, 2022	17,035	5,448	250	8,222	1,175	32,130

* A reconciliation was not performed for non-vested participants due a refund of their account balance.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Report for Plan Year Ending September 30, 2022

Exhibit IV-1

General Information Sheet

1. Name of Plan: U.S. Army Nonappropriated Fund Employee Retirement Plan

2. Name and address of Plan Sponsor:

   U.S. Army Community and Family Support Center
   NAF Employee Benefits Office
   P.O. Box 340309
   Fort Sam Houston, Texas 78234

3. Name and phone number of Plan Administrator (or other responsible Plan official):

   Anita Jannsen
   Chief, NAF Personnel Services Division
   (210) 466-1620

4. Type of plan entity: Single-employer plan

5. Date plan established: January 1, 1966

6. Information on plan participants at the beginning of plan year:

   Participant data was collected as of October 1, 2022

Active participants	17,035
Separated employees entitled to deferred benefits	5,448
Retired, disabled and beneficiaries	9,647
Former non-vested participants due an account balance	28,882
Total Participants	61,012

7. Type of plan: Defined benefit pension plan

8. Administrative cost: See Note 4.

9. During the current plan year, the Plan was not merged into nor consolidated with another plan nor were assets or liabilities transferred to another plan.

10. The Plan is funded through BGI U.S. Debt, Janus Midcap, Ameritas (formerly Bankers Life of Nebraska), Adams Street Partners, Inc. (formerly Brinson Partners, Inc.), Wells Capital Management Small Cap, RREEF America REIT II, UBS - RESA, Artisan

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

International Value, AS CO Invest IV, Angelo Gordon Core + Realty, UBS Trumball TPG Value Fund, AS Growth EQ VII, Blackstone Hedge, Blackstone Property, SSGA S&P 500 Flagship, Harding Loevnier, Newfleet Mgmt., Baille Gifford EAFE, Lazard Asset Mgmt., U.S. Army N.A.F. Retirement Trust (SSGA STIF), Sprucegrove, Prime Property, ABS Emerging Markets, and Prudential Core Plus.

11. This valuation was performed based on active, retiree and vested terminated data as of October 1, 2022.

12. The Projected Unit Credit actuarial cost method was used in completing Tables 1 and 2. A summary of the actuarial methods is attached.

13. Actuarial assumptions:

1. Economic:

(1) Rate of return on plan investments: 7.25% per annum.

(2) Ratio of salary expected at normal retirement age (62) to salary for a new entrant at:

	Men	Women
Age 25	7.25	7.25
Age 40	4.15	4.15
Age 55	1.98	1.98

(3) Inflation Rate (in relation to plan provisions for post-retirement benefit adjustments): 3.25% per annum.

2. Decrements:

(1) Basis of mortality assumptions:

Amount-weighted RP-2006 Mortality Table (same as RP-2014 adjusted back to 2006 using Scale MP-2014), adjusted by 115% for males and 110% for females:

Non-Annuitants: Employee Tables, Total Dataset
Retirees, Beneficiaries: Healthy Annuitant Tables, Total Dataset
Disabled Retirees: Disabled Retiree Table

The mortality rates are projected generationally from the base year using Projection Scale MP-2020.

(2) (a) Normal retirement age: 62 and 5 years of service.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

(b) Lowest age at which employee may voluntarily retire with full benefits: age 55 with 30 years of service or age 60 with 20 years of service.

(3) Basis of withdrawal assumptions:
Table based on turnover adjusted to reflect the Plan's experience.

A summary of the assumptions and changes made since the prior report is attached.

14. A summary of the Plan provisions and changes made since the prior report is attached.

******

I declare that I have examined this report, including accompanying tables and statements, and to the best of my knowledge and belief it is true, correct, and complete.

Signature of Plan Administrator: ______________________________
Anita Jannsen
Chief, NAF Personnel Services Division

Date: ______________________________

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-2

Statement of Enrolled Actuary

This report has been prepared pursuant to P.L. 95-595 for the year ending September 30, 2022. To the best of my knowledge, the report is complete and accurate. It should be noted, however, that the asset information shown has not been audited by Cheiron, Inc. In addition, the liabilities shown in this report are from the United States Army Nonappropriated Retirement Plan Valuation Report as of October 1, 2022, as prepared by Cheiron, Inc. In my opinion, the actuarial assumptions appear to be individually reasonable related to the experience of the Plan and to reasonable expectations and represent my best estimate of anticipated experience under the Plan.

Signature:

Alison M Chafin

Alison Chafin, FSA, EA, MAAA
Enrolled Actuary
#23-08294
Cheiron, Inc.
9115 Harris Corners Parkway, Suite 380
Charlotte, NC 28269

Date: August 14, 2023

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-3
Statement of Net Assets Available for Benefits

	September 30, 2022	September 30, 2021
Assets		
Investments and Deposit administration contracts		
BGI U.S. Debt	$ 45,491,431	$ 53,213,267
Janus Midcap	107,264,415	207,304,600
Ameritas (Bankers Life of Nebraska)	47,161	46,021
Adams Street Partners (formerly Brinson)	312,626,896	348,174,737
Wells Capital Management Small Cap	70,324,158	155,270,032
RREEF America REIT II	73,905,928	59,152,653
UBS - RESA	42,176,183	46,888,714
Artisan International Value	133,691,769	157,995,713
AS CO Invest IV	11,367,784	9,907,962
Angelo Gordon Core + Realty	6,154,169	9,425,846
UBS Trumball TPG Value Fund	68,761,065	56,811,873
AS Growth EQ VII	9,062,604	6,203,582
Blackstone Hedge	117,197,889	114,710,192
Blackstone Property	71,637,880	0
SSGA S&P 500 Flagship	566,117,393	669,778,251
Harding Loevnier	1,892	52,890,874
Newfleet Mgmt	125,263	124,429
Baille Gifford EAFE	63,528,013	105,512,691
Lazard Asset Mgmt	77,177,977	105,372,953
U.S. Army N.A.F. Ret. Trust (SSGA STIF)	3,404,197	132,012,276
Sprucegrove	84,748,646	107,869,642
Prime Property	50,000,000	0
ABS Emerging Markets	35,000,000	0
Prudential Core Plus	392,139,181	262,053,400
Total Investments	$ 2,341,951,894	$ 2,660,719,708
Receivables		
Employer and employee contributions	$ 4,726,376	$ 4,155,272
Interest Receivable	14,336	4,729
Accounts Receivable	6,740,431	7,129,547
Total Receivables	$ 11,481,143	$ 11,289,548
Cash on deposit with U.S. Army Banking and Investment Fund	$ 13,711,665	$ 4,436,261
Total Assets	$ 2,367,144,702	$ 2,676,445,517
Liabilities		
Accounts payable and accrued liabilities	40,779,607	27,341,261
Net Assets Available for Benefits	$ 2,326,365,095	$ 2,649,104,256

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-4
Statement of Changes in Net Assets Available for Benefits

	Fiscal Year Ending September 30, 2022	Fiscal Year Ending September 30, 2021
1. Net assets available for benefits at beginning of Plan year	$ 2,649,104,256	$ 2,064,078,941
2. Investment Income:		
(a) Net appreciation (depreciation) in fair value of investments *	$ (365,341,809)	$ 541,908,527
(b) Interest	12,658,533	14,623,613
(c) Other income	67,585,686	66,583,293
(d) Less: Investment expenses	10,423,565	16,482,718
(e) Total	$ (295,521,155)	$ 606,632,715
3. Contributions: (Note 5)**		
(a) Employer	$ 62,669,318	$ 59,967,270
(b) Employee	16,966,253	16,238,980
(c) Total	$ 79,635,571	$ 76,206,250
4. Total additions (2) + (3)	$ (215,885,584)	$ 682,838,965
5. Benefits paid directly to participants		
(a) Refunds	$ 1,808,965	$ 1,152,585
(b) Annuities	98,150,216	91,403,117
(c) Total	$ 99,959,181	$ 92,555,702
6. Administrative Expenses	$ 6,894,396	$ 5,257,948
7. Total deductions (5) + (6)	$ 106,853,577	$ 97,813,650
8. Net additions (deductions): (4) - (7)	$ (322,739,161)	$ 585,025,315
9. Net assets available for benefits at end of Plan year: (1) + (8)	$ 2,326,365,095	$ 2,649,104,256

* Net appreciation (depreciation) in investments as provided by Army reflects adjustments made after the audit was complete and may not agree with the audited financial statements.

** Includes all other contributions for Portability and DSR Income, Service Buyback Income, Conversion Income, GPC Rebate, and Miscellaneous Income.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-5
Statement of Present Value of Accumulated Plan Benefits

	October 1, 2022	October 1, 2021
Vested Benefits		
Participants Currently Receiving Payment*	$ 1,162,409,364	$ 976,685,306
Other Participants	886,201,857	860,775,976
Total Vested Benefits	$ 2,048,611,221	$ 1,837,461,282
Non-vested Benefits	$ 57,850,864	$ 56,997,336
Total Present Value of Accumulated Plan Benefits	$ 2,106,462,085	$ 1,894,458,618
Interest Rate Used	7.25%	7.25%

* Includes remaining liability under the Plan for participants receiving benefits from Ameritas Life Insurance Corporation.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-6
Statement of Changes in Present Value of Accumulated Plan Benefits

	Fiscal Year Ending September 30, 2022	Fiscal Year Ending September 30, 2021
1. Present Value of Accumulated Plan Benefits at beginning of Plan year	$ 1,894,458,618	$ 1,767,418,545
2. Increase (decrease) during the year attributable to:		
(a) Benefits accumulated and actuarial (gain) or loss	$ 178,174,520	$ 19,801,642
(b) Interest due to decrease in discount period	133,788,128	129,148,299
(c) Plan amendment(s)	0	0
(d) Changes in actuarial assumptions	0	70,645,834
(e) Benefit Payments	(99,959,181)	(92,555,702)
3. Net increase (decrease):	$ 212,003,467	$ 127,040,073
4. Present value of Accumulated Plan Benefits at end of Plan year	$ 2,106,462,085	$ 1,894,458,618

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-7
Table 1
Actuarial Status Information

		October 1, 2022	October 1, 2021
1.	Present Value of Future Benefits:		
	(a) Annuitants now on rolls *	$ 1,162,409,364	$ 976,685,306
	(b) Separated employees	147,883,231	172,615,903
	(c) Participants due an account balance	22,616,605	19,680,209
	(d) Active participants	1,777,511,493	1,710,144,129
	(e) Total	$ 3,110,420,693	$ 2,879,125,547
2.	Less: Present Value of Future Normal Cost Contributions	765,779,092	754,909,828
3.	Actuarial Liability [(1e) - (2)]	$ 2,344,641,601	$ 2,124,215,719
4.	Less: Actuarial Value of Assets	2,385,391,973	2,264,182,834
5.	Unfunded Actuarial Liability [(3) - (4)]	$ (40,750,372)	$ (139,967,115)
6.	Normal cost as a percentage of covered payroll (mid-year) **		
	(a) Employee	2.00%	2.00%
	(b) Employer	9.07%	8.36%
	(c) Total	11.07%	10.36%
7.	Ratio of Assets in fund to Present Value of Future Benefits for Annuitants now on Roll		
	(a) Line 1(a) plus accumulated employee contributions	$ 1,308,610,532	$ 1,102,367,343
	(b) Actuarial Value of Assets divided by (a)	1.82	2.05
	(c) Ratio in (b) last year	2.05	1.88
	(d) Ratio in (b) two years ago	1.88	1.79

* Includes remaining liability under the Plan for participants receiving benefits from Ameritas Life Insurance Corporation

** Includes assumed administrative expenses

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-8
Table 2A

Comparison of Actuarial Funding with Actual Contributions
(in dollars)

(1) Plan Year	(2) Total Normal Cost[1,2]	(3) 40-Year Amortization of Unfunded Liability[1]	(4) Total (Col. 2 plus Col. 3)	(5) Actual Contributions To Plan From All Sources	(6) Difference (Col. 5 less Col. 4)	(7) Col. 5 divided by Col.4
2022-23	$ 85,659,627	$ (3,037,569)	$ 82,622,058	N/A	N/A	N/A
2021-22	76,106,868	(10,433,272)	65,673,596	$ 79,635,571	$ 13,961,975	1.21
2020-21	68,506,934	(6,195,545)	62,311,389	76,206,250	13,894,861	1.22
2019-20	67,453,186	(3,267,673)	64,185,513	78,092,646	13,907,133	1.22
2018-19	64,566,732	(1,879,595)	62,687,137	74,627,561	11,940,424	1.19
2017-18	62,150,810	1,520,910	63,671,720	71,206,914	7,535,194	1.12
2016-17	58,494,078	3,617,517	62,111,595	68,148,275	6,036,680	1.10
2015-16	57,667,269	4,905,747	62,573,016	66,534,445	3,961,429	1.06
2014-15	54,514,642	4,853,237	59,367,879	65,711,312	6,343,433	1.11
2013-14	53,673,556	7,215,422	60,888,978	62,325,623	1,436,645	1.02
2012-13	53,829,936	10,217,157	64,047,093	65,313,651	1,266,558	1.02
2011-12	54,141,214	10,635,437	64,776,651	59,846,992	(4,929,659)	0.92
2010-11	54,736,827	8,457,840	63,194,667	64,449,655	1,254,988	1.02
2009-10	50,902,344	6,495,113	57,397,457	59,150,588	1,753,131	1.03
2008-09	45,326,221	1,789,591	47,115,812	53,667,209	6,551,397	1.14
2007-08	40,733,684	(2,030,452)	38,703,232	47,032,806	8,329,574	1.22
2006-07	38,457,296	(711,664)	37,745,632	41,621,364	3,875,732	1.10
2005-06	35,387,224	(100,202)	35,287,022	39,596,220	4,309,198	1.12
2004-05	31,724,981	1,209,066	32,934,047	35,435,693	2,501,646	1.08
2003-04	27,016,602	(752,297)	26,264,305	30,115,404	3,851,099	1.15
2002-03	20,651,255	(971,529)	19,679,726	24,486,375	4,806,649	1.24
2001-02	19,120,495	(3,961,885)	15,158,610	22,674,448	7,515,838	1.50
2000-01	17,889,965	(6,198,677)	11,691,288	19,171,038	7,479,750	1.64

[1] Amounts as of mid-year.

[2] Total normal cost includes administrative expense assumption.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-8 cont.
Table 2B

Comparison of Actuarial Funding with Actual Contributions
(as percentage of estimated active member payroll for the year)

(1) Plan Year	(2) Total Normal Cost[1,2]	(3) 40-Year Amortization of Unfunded Liability[1]	(4) Total (Col. 2 plus Col. 3)	(5) Actual Contributions To Plan From All Sources	(6) Difference (Col. 5 less Col. 4)
2022-23	11.07%	(0.39%)	10.68%	N/A	N/A
2021-22	10.36	(1.42)	8.94	10.84%	1.90%
2020-21	9.85	(0.89)	8.96	0.11	(8.85)
2019-20	9.33	(0.45)	8.88	10.80	1.92
2018-19	9.38	(0.27)	9.11	10.85	1.74
2017-18	9.40	0.23	9.63	10.77	1.14
2016-17	9.29	0.57	9.86	10.82	0.96
2015-16	9.17	0.78	9.95	10.58	0.63
2014-15	9.08	0.81	9.89	10.95	1.06
2013-14	8.97	1.21	10.18	10.42	0.24
2012-13	8.41	1.60	10.01	10.20	0.19
2011-12	8.52	1.67	10.19	9.41	(0.78)
2010-11	8.40	1.30	9.70	9.89	0.19
2009-10	8.42	1.07	9.49	9.78	0.29
2008-09	8.47	0.33	8.80	10.03	1.23
2007-08	8.60	(0.43)	8.17	9.93	1.76
2006-07	8.46	(0.16)	8.30	9.16	0.86
2005-06	8.52	(0.02)	8.50	9.54	1.04
2004-05	8.26	0.31	8.57	9.23	0.66
2003-04	8.37	(0.23)	8.14	9.33	1.19
2002-03	7.58	(0.36)	7.22	8.99	1.77
2001-02	8.04	(1.67)	6.37	9.53	3.16
2000-01	8.42	(2.92)	5.50	9.02	3.52

[1] Amounts as of mid-year.

[2] Total normal cost includes administrative expense assumption.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-8 (continued)

Table 3-3a

Past and Projected Flow of Plan Assets

The Market Value of Assets and historical cash flows over the last fifteen years are shown in the Trends discussion of Section I – *Summary* and Section II – *Disclosures Related to Risk*.

The table on the next page projects the Plan's expected contributions (both employer and employee), benefit payments, and administrative expenses over the next ten years. The expected employer contributions assume that the employers will continue to contribute a fixed 7.60% of pay and do not reflect the amount based on the actuarially determined contribution rate. Expected employee contributions are assumed to remain at 2.00% of payroll. As noted, the projected contributions do not reflect any additional employer contributions for other sources such as portability and DSR or service buybacks. These additional contributions are intended to offset the additional liabilities that would be recognized if any of these events actually occurred. Expected benefit payments are projected for the closed group valued as of October 1, 2022. Projecting any further than ten years using a closed group would not yield reliable projections due to the omission of new hires. Administrative expenses are assumed to be $8.0 million per year through the fiscal year ending September 30, 2027, $2.0 million in the fiscal year ending September 30, 2028, increasing with inflation of 3.25% a year thereafter.

The projections reflect that all the assumptions are realized, including an investment return of 7.25% per year and payroll growth of 3.75% per year. Future projections may differ significantly from what is presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions, changes in assumptions, and changes in plan provisions or applicable law.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-9
Ten-Year Projection of Cash Flows

Plan Year Ending 9/30	Market Value of Assets (BOY)	Estimated Employer Contributions at 7.6%	Estimated Employee Contributions at 2.0%	Estimated Benefit Payments*	Estimated Administrative Expenses	Market Value of Assets (EOY)
2023	$ 2,326,365,095	$ 58,790,070	$ 15,471,071	$ 117,879,142	$ 8,000,000	$ 2,441,570,149
2024	2,441,570,149	60,994,698	16,051,236	125,611,388	8,000,000	2,560,003,909
2025	2,560,003,909	63,281,999	16,653,157	133,614,525	8,000,000	2,681,728,066
2026	2,681,728,066	65,655,074	17,277,650	141,896,014	8,000,000	2,806,805,112
2027	2,806,805,112	68,117,139	17,925,562	150,573,636	8,000,000	2,935,184,303
2028	2,935,184,303	70,671,532	18,597,771	154,932,559	2,000,000	3,077,912,031
2029	3,077,912,031	73,321,714	19,295,187	164,359,560	2,065,000	3,224,624,278
2030	3,224,624,278	76,071,278	20,018,757	174,354,907	2,132,113	3,375,149,154
2031	3,375,149,154	78,923,951	20,769,460	184,369,035	2,201,407	3,529,876,245
2032	3,529,876,245	81,883,599	21,548,315	194,307,750	2,272,953	3,689,325,919

* Assumes that the $22.6 million in account balances for the 28,882 non-vested participants due a refund of their employee contributions are paid uniformly over next five years.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit IV-9

NOTE 1 – VALUATION OF INVESTMENTS

Investments are stated at market value. The Plan's deposits with insurance carriers are valued at contract value. Contract value represents contributions made under the contract, plus interest income, plus realized security gains net of losses, plus unrealized security gains net of losses, less transfers of funds back to the U.S. Army Central Retirement Fund (ACRF), less funds used to meet ACRF obligations, less administrative expenses.

NOTE 2 – CONTRACTS WITH INSURANCE COMPANIES AND INVESTMENT MANAGEMENT AGREEMENT

The Plan has deposit administration contracts with an insurance company as described below:

Ameritas (Formerly Bankers Life of Nebraska)

On March 1, 1983, the Plan terminated its deposit administration contract with Ameritas. Under the terms of the termination agreement, Ameritas paid the Plan $5,179,098 on September 1, 1987.

The Plan's only future obligation with respect to Ameritas is to pay the annual cost-of-living adjustments for the retirees for whom annuity contracts were purchased in 1983 when the agreement with Ameritas was terminated. The amount held on deposit with Ameritas at September 30, 2022 was $47,161.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Investment Management Agreement

The Plan also has investment management agreements with various companies. The agreements provide that the companies have sole responsibility for investing the funds under their management within certain pre-described guidelines, and those earnings on the funds are based solely on the performance of the investments with a performance goal expressed as a total rate of return as defined in the agreement. The fair value of investments under management agreements at September 30, 2022 was:

BGI U.S. Debt	$ 45,491,431
Janus Midcap	107,264,415
Adams Street Partners, Inc. (formerly Brinson Partners, Inc.)	312,626,896
Wells Capital Management Small Cap	70,324,158
RREEF America REIT II	73,905,928
UBS - RESA	42,176,183
Artisan International Value	133,691,769
AS CO Invest IV	11,367,784
Angelo Gordon Core + Realty	6,154,169
UBS Trumball TPG Value Fund	68,761,065
AS Growth EQ VII	9,062,604
Blackstone Hedge	117,197,889
Blackstone Property	71,637,880
SSGA S&P 500 Flagship	566,117,393
Harding Loevnier	1,892
Newfleet Mgmt.	125,263
Baille Gifford EAFE	63,528,013
Lazard Asset Mgmt.	77,177,977
U.S. Army N.A.F. Ret. Trust (SSGA STIF)	3,404,197
Sprucegrove	84,748,646
Prime Property	50,000,000
ABS Emerging Markets	35,000,000
Prudential Core Plus	392,139,181

NOTE 3 – CASH WITH ARMY BANKING AND INVESTMENT FUND

The Plan had $13,711,665 invested in the United States Army Banking and Investment Fund (ABIF) at September 30, 2022. The ABIF acts as a pooling agent for all Army Nonappropriated activities and invests principally in U.S. Treasury securities, U.S. government agency securities, and certificates of deposit. The rate of interest paid to depositors is determined periodically by ABIF management.

NOTE 4 – RELATED PARTY TRANSACTION

Appropriated funds of the United States Army provide certain general administrative support, including office space, communication, and certain supplies to the U.S. Army Command which administers the Plan. The value of some of these contributed series and supplies is not currently available and thus, is not reflected in the accompanying financial statements.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

The Plan, the United States Army Medical/Life Fund (AMLF), and the 401(k) plan share common offices and administrative personnel. Common expenses are paid by the Plan and the AMLF and 401(k) plan allocated portions are reimbursed to the Plan. The balance due to the Retirement Plan as of September 30, 2022 for expenses allocated to the Army Medical/Life Fund and the 401(k) Saving Plan is $3,821,293 and $1,413,367, respectively.

The NAF Financial Services deducted employer and employee contributions from the various payroll cycles and remitted the funds to the Plan at a cost of $1,681 in the year ended September 30, 2022. The accounting charges for the NAF Financial Services totaled $923,914.

NOTE 5 – CONTRIBUTIONS

As a condition of participation, employees are required to contribute 2% of their salary to the Plan. Prior to January 1, 1991, employees were required to contribute 3% of their salary.

Effective January 1, 2001, new hires, rehires, and newly eligible employees may elect to stop contributing to the Plan after six months. The employee’s past contribution will be refunded upon termination only if the employee elects a refund in lieu of future retirement benefits when vested.

Although it has not expressed any intention to do so, the United States Army Nonappropriated Fund has the right under the Plan to discontinue its contributions at any time and to terminate the Plan.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Summary of Methods and Assumptions as of October 1, 2022

A. Actuarial Methods

Exhibit IV-10

1. Calculation of Normal Cost and Actuarial Liability: The actuarial method used to determine the Normal Cost and Actuarial Liability was the Projected Unit Credit actuarial cost method described below.

   Projected Unit Credit Actuarial Cost Method: The objective under this method is to allocate the total pension benefit to which each participant is expected to become entitled at retirement to the participant's past and future service. The allocation is accomplished by applying the Plan's accrual formula to the projected final salary at retirement.

   An Actuarial Liability is calculated at the valuation date as the Present Value of Benefits allocated to service prior to that date.

   The Unfunded Actuarial Liability at the valuation date is the excess of the Actuarial Liability over the Actuarial Value of Assets of the Plan.

   The Normal Cost is the present value of those benefits which are expected to be allocated to service during the year beginning on the valuation date.

   Under this method, differences between the actual experience and that assumed in the determination of costs and liabilities will emerge as adjustments in the Unfunded Actuarial Liability, subject to amortization.

2. Calculation of Actuarial Value of Assets: Market Value of Assets is the amount certified by outside auditors as available net assets. This includes funds on deposit with insurance companies, funds on deposit with the U.S. Army Banking and Investment Fund, cash, and accrued items.

   As of October 1, 1997, the Actuarial Value of Assets was set equal to the Market Value of Assets. For each subsequent year, the Actuarial Value of Assets is calculated as follows:

   (a) The prior year's Actuarial Value of Assets is

   - Increased by actual contributions, interest at the assumed rate of return on prior year's actuarial value of assets for a full year and interest at an assumed rate of return on contributions for one-half year.
   - Decreased by actual benefit payments, administrative expenses and other payments and interest at the assumed rate of return on these payments for one-half year.

   (b) The amount from (a) above is the expected value.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

(c) 20% of the difference between Market Value and expected value is added to "expected" value.

(d) The result from (c) is the Actuarial Value of Assets adjusted, if necessary, to be not less than 20% below and not more than 20% above the Market Value of Assets.

3. Calculation of the Employer Actuarial Contribution Rate: The method for determining the employer actuarial contribution rate is as follows:

    (a) The Normal Cost as described on the previous page plus assumed administrative expenses; *plus*

    (b) A level dollar amount such that the Unfunded Actuarial Liability would be paid off in 15 years; *less*

    (c) Estimated employee contributions of 2% of payroll.

    The amount calculated is adjusted with interest to the middle of the year and then divided by valuation earnings to convert to a percent of pay.

    The Unfunded Actuarial Liability is calculated based upon a 15-year level dollar rolling amortization. This rate should not necessarily be construed as a recommended contribution level as this will not fully amortize the unfunded actuarial liability.

4. Valuation Software: Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies (WinTech) to calculate the liabilities, normal costs, and projected benefit payments. We have relied on WinTech as the developer of ProVal. We have reviewed ProVal and have a basic understanding of it and have used ProVal in accordance with its original intended purpose. We have not identified any material inconsistencies in assumptions or output of ProVal that would affect this actuarial valuation.

5. Projection Model: This report includes deterministic projections of future contributions, assets, and funded status for the purpose of assisting the Leadership with the management of the Plan. We have used Cheiron's *P-Scan* model to develop these projections. The model is also used to stress test the impact of volatile asset returns over the projection period.

    The *P-Scan* projection uses projected benefit payments for current members but does not include projected benefit payments for new members. This limitation is not material for the next 20 years, but longer projection periods should be viewed with caution.

    The *P-Scan* projection uses standard roll-forward techniques that implicitly assume a stable active population. Changes in the demographic characteristics of the active population will lead to different results.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Summary of Methods and Assumptions as of October 1, 2022

B. Actuarial Assumptions

Exhibit IV-10 (continued)

Rationale for Economic and Demographic Assumptions

All demographic assumptions were adopted by the Board in September 2021 on the basis of the proposals made by Cheiron as a result of an experience study covering the period October 1, 2015 through September 30, 2020. Please refer to the experience study presentation dated September 20, 2021 for the rationale to these assumptions. The investment return, general inflation, and annual rate of general wage inflation assumptions were adopted by the Board in April 2022. Please refer to the previously mentioned September 2021 experience study presentation as well as the revisit of economic assumptions in the March 2022 presentations for rationale of these economic assumptions. The administrative expense assumption was updated concurrently with this valuation, as adopted by the Board in July 2023, to recognize future Plan costs expected to be incurred for Army's system transition and expectations for the future.

1. Investment Return: 7.25% annually, net of investment expenses

2. General Inflation: 3.25% annually

3. Annual Rate of General Wage Increase: 3.75%

4. Annual Rate of Merit/Seniority Wage Increase (in addition to the General Wage Increase, applied multiplicatively): See Rates in Exhibit A

5. Social Security Wage Base: assumed to increase with general inflation

6. Administrative Expenses: $8,000,000 per year through fiscal year ending September 30, 2027; $2,000,000 in fiscal year ending September 30, 2028 and increasing with 3.25% annual inflation thereafter. Assumed payable as of the middle of the year.

7. Mortality:

   Amount-weighted RP-2006 Mortality Table (same as RP-2014 adjusted back to 2006 using Scale MP-2014), adjusted by 115% for males and 110% for females:

   Non-Annuitants: Employee Tables, Total Dataset
   Retirees, Beneficiaries: Healthy Annuitant Tables, Total Dataset
   Disabled Retirees: Disabled Retiree Table

   The mortality rates are projected generationally from the base year using Projection Scale MP-2020.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

8. Termination: Rates set forth in Exhibit A

9. Disability: Rates from disability set forth in Exhibit B

10. Retirement Age: See Exhibit B

11. Form of payment and proportion of participants with eligible beneficiaries for survivor:

    Participants are assumed to elect the Normal Benefit. 88% of participants are assumed to be married. 45% of participants are assumed to be married and elect the Normal Benefit for a participant who has a spouse. Wives are assumed to be two years younger than their husbands. For current in-pay participants, actual spouse date of birth is used if available as well as an actual form of payment elected.

12. Post-retirement cost-of-living adjustments: assumed to increase with general inflation

13. Future service accruals for active employees: 1.0 year of Credited Service earned per year

14. Noncontributing participants:

    100% of inactive participants due an account balance are assumed to still be due a refund of their account balances. Non-vested participants entitled to a refund of the employee contributions are included in the valuation and are assumed to be paid out within five years. Vested participants are assumed to remain in service but continue in a noncontributory status.

15. Maximum benefit:

    The maximum benefit payable under IRC Section 415, effective at the valuation date ($245,000 for 2022) assumed to increase with general inflation.

16. Maximum pensionable pay:

    IRC Section 401(a)(17) limit effective at valuation date ($305,000 for 2022) assumed to increase with general inflation.

17. Changes since prior year:

    Administrative expenses were updated to reflect future Plan costs expected to be incurred for Army's system transition and expectations into the future.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit A

	Merit/Seniority Wage	Termination*	
Service	**Increase**	**Male**	**Female**
0	15.00%	30.00%	35.00%
1	7.00%	25.00%	30.00%
2	6.00%	20.00%	25.00%
3	5.00%	15.00%	20.00%
4	4.25%	13.00%	17.00%
5	3.75%	11.00%	14.00%
6	3.25%	9.00%	12.00%
7	2.75%	8.00%	10.00%
8	2.50%	7.00%	8.00%
9	2.25%	6.50%	6.50%
10	2.00%	6.25%	6.25%
11	1.75%	6.00%	6.00%
12	1.50%	5.50%	5.50%
13	1.25%	5.00%	5.00%
14	1.00%	4.50%	4.50%
15	0.75%	4.00%	4.00%
16	0.75%	3.00%	3.00%
17	0.75%	2.75%	2.75%
18	0.50%	2.50%	2.50%
19	0.50%	2.25%	2.25%
20	0.50%	2.00%	2.00%
21	0.25%	2.00%	2.00%
22	0.25%	2.00%	2.00%
23	0.25%	2.00%	2.00%
24	0.00%	2.00%	2.00%
25+	0.00%	2.00%	2.00%

* When members are eligible to retire, it is assumed that their termination rates are zero.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Exhibit B

Retirement Rates*
Number of retirements per 1,000 members

Age	Reduced	Unreduced
50	25	N/A
51	25	N/A
52	50	N/A
53	50	N/A
54	75	N/A
55	75	200
56	75	140
57	75	100
58	75	100
59	100	125
60	100	150
61	150	175
62	N/A	175
63	N/A	175
64	N/A	175
65	N/A	200
66	N/A	225
67	N/A	175
68	N/A	175
69	N/A	175
70+	N/A	1,000

Disability
Number of Disablements per 1,000 members (sample rates)

Age	Rate
<35	0.14
35	0.16
40	0.28
45	0.60
50	1.04
55	1.19
60	2.16
62+	0.00

* 100% of terminated vested participants are assumed to retire at age 62.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Data Assumptions and Methods

The methodology for preparing the data used for the valuation is based on upon the assumptions and methods as outlined below, which was described in the Data Memo provided to the Fund office for review and approval dated March 16, 2023 and confirmed through the data questions process.

SETTING VALUATION STATUS

Active, Vested Deferred, and Non-Vested Deferred

The raw data file "Valuation Report Final submitted 21 Nov 22.xlsx" included several different valuation statuses, including Non-Vested Deferred, Vested Deferred, and Active members, as well as those who should be excluded from the valuation. Each status was set using the following criteria:

Vested Deferred

- The "DEFERRED FLAG" value is "Y".
- The "ASSIGMENT CATEGORY" value is "FLEX" and Credited Service is greater than or equal to 60 months.
- Reported Salary is either $0 or missing, and Credited Service is greater than or equal to 60 months.

Non-Vested Deferred

- The "ASSIGNMENT CATEGORY" value is "FLEX", Credited Service is less than 60 months, and the reported Account Balance is greater than $0.
- Reported Salary is either $0 or missing, Credited Service is less than 60 months, and the reported Account Balance is greater than $0.

Excluded

- The "ASSIGNMENT CATEGORY" value is "FLEX", Credited Service is less than 60 months, and the reported Account Balance is $0.
- Reported Salary is either $0 or missing, and the reported Account balance is $0.

Active

- All remaining participants will be valued as active, subject to duplicate and portee corrections.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Additional Non-Vested Deferred

We developed the population of participants due a return of their account balance as follows:

- Some of these participants were provided in the 2022 census data as identified in the preceding section.
- The additional Non-Vested Deferred participants were determined as follows:
    - Participants that were Non-Vested Deferred in the 2021 Valuation and were not reported in the 2022 Valuation census data.
    - Participants that were Active with less than 60 months of service in the 2021 Valuation and were not reported in the 2022 Valuation census data.

Miscellaneous

For those reported in the raw data file “Pension_Payment_Monthly_Listing_Report FY 22 submitted 22 Nov 22.xlsx”, we excluded from the valuation those who meet the following criteria:

- Payees with a “Payroll Name” containing “Suspended”
- Payees with a “Report Period Totals” equal to $0

The Fund Office has previously indicated that FERS portees are individuals who are now employed by Army NAF but continue to participate in FERS/TSP. Therefore, these participants are never eligible to participate in the Army NAF Retirement Plan and are therefore excluded from our annual valuation.

DUPLICATES

Status	Method for Valuation
In-Pay	For those reported with two identical records, keep one and remove the other.
Active and Refund	Remove record if refund payment date is after the reported latest hire date. Otherwise, include in valuation with the reported account balance.
Deferred and Refund	Remove record if reported account balance is less than $1,000. Otherwise, include in valuation with the reported account balance.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

DATA ASSUMPTIONS AND METHODS

The following tables provide the assumptions and methods used to set key data fields used in the valuation.

Active	Base Data Set Fields Used
Credited Service	• Based on the number of months reported in the "SCD MONTHS OF SERVICE" data field. An adjusted date of hire is retroactively calculated from the valuation date. • For participants provided to us in the file "Valuation Report PROD 20221117 run5 FINAL CORRECTIONS submitted 20 Dec 22.xlsx", we will use the corrected service as reported in that file. • For participants originally reported in the actuarial valuation report with 0-4 months of service, we will use the service as provided in the file "Valuation Report creditable service months submitted 1 Feb 23.xlsx" • For all other participants, two months will be subtracted from the service originally reported. • If no service was provided in 2022, add 12 months to 2021 Valuation service. • If 2021 Valuation service not available, use 2020 Valuation service.
Valuation Salary	• If "Assignment Category" is equal to "PR", assume part time. Otherwise, assume full time. • If "Latest Hire Date" is after October 1, 2021 and Credited Service is less than 12 months, salary will be prorated based on elapsed time between "Latest Hire Date" and October 1, 2022. Part-time workers are assumed to work 75% of the time and will have their prorated salary adjusted accordingly. • Otherwise, use value reported in "SALARY AMOUNT" • If no salary was provided in 2022, use 2021 Valuation salary increased by 3.75% • If 2021 Valuation salary not available, use 2020 Valuation salary.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

Vested Deferred	Base Data Set Fields Used
Monthly Pension Benefit	• If reported in "Valuation Report Final submitted 21 Nov 22.xlsx" data file, use "ACCRUED BENEFIT ASSUMING 9/30/2022 Termination for Current Active Employees" as provided. • If Vested Deferred in 2021 Valuation, use prior year monthly pension benefit. • If Active in 2021 Valuation, estimate using prior year service and salary, assuming a mid-year termination date. • If not Active or Vested Deferred in 2021 Valuation, estimate using average monthly pension amount for other Vested Deferred with similar amounts of service.

Non-Vested Deferred	Base Data Set Fields Used
Account Balance	• If reported in "Valuation Report Final submitted 21 Nov 22.xlsx" data file, use "BALANCE" as provided. • If Active in 2021 Valuation, increase prior year account balance with 3% interest and add estimated PYE 2022 contributions using an assumed full-time salary to middle of year termination. • If reported in "MOD Report submitted 23 Nov 22.xlsx" data file, use "EMPLOYEE CONTRIBS" plus "EMPLOYEE INTEREST" increased to October 1, 2022 with 3% interest annually. • If Non-Vested Deferred in 2021 Valuation, increase prior year account balance with 3% interest.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

In-Pay	Base Data Set Fields Used
Beneficiary Date of Birth & Gender	• If beneficiary demographic information was not provided in either "Retirement by Fiscal Year Report 1 Apr 20 – 30 Sep 22 submitted 11 Jan 23.xlsx" or "Missing Annuity Info submitted 30 Jan 23.xlsx", assume same as prior year. • If prior year information is not available, assume wives are two years younger than their husbands and beneficiary gender is opposite the participant.
Payment Form	• If the retiree's elected benefit option was not provided or was given as "RP Regular Annuity Conversion" in either "Retirement by Fiscal Year Report 1 Apr 20 – 30 Sep 22 submitted 11 Jan 23.xlsx" or "Missing Annuity Info submitted 30 Jan 23.xlsx", assume same as prior year. • If the prior year benefit option is not available, assume a 55% Joint & Survivor benefit option for retirees and a Single Life Annuity for beneficiaries. • "RP No Reduction" and "RP Early No Reduction" assumed to be single life annuities.
Annual Pension Benefit	• If "Payroll Name" is equal to "Retiree Pension Quarterly Jan Apr Jul Oct Due Date", the annual pension benefit amount will be valued as "July Gross Pay" multiplied by 4. • If "Payroll Name" is equal to "Retiree Pension Quarterly Feb May Aug Nov Due Date", the annual pension benefit amount will be valued as "August Gross Pay" multiplied by 4. • If "Payroll Name" is equal to "Retiree Pension Quarterly Mar Jun Sep Dec Due Date", the annual pension benefit amount will be valued as "September Gross Pay" multiplied by 4. • Otherwise, the annual pension benefit amount will be valued as "September Gross Pay" multiplied by 12.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

SUMMARY OF PLAN PROVISION AS OF OCTOBER 1, 2022

Exhibit IV-11

1. Effective Date of Plan:

   January 1, 1966. Most recent amendment and reinstatement as of January 1, 2014.

2. Employees Eligible for Participation:

   All employees of covered U.S. Army-NAF activities working at least 20 hours per week are eligible to become Participants on their date of employment. Effective January 1, 2001, new hires, rehires, and newly eligible employees are required to participate in the Plan for the first six months. Employee contributions are required for participation.

3. Definitions:

   (a) Earnings: Gross annual compensation as reported on Form W-2, plus the Participant's pre-tax contributions to the Employer's 401(k) plan or for health benefits, capped by the limit as indexed under the Code.
   (b) Final Average Earnings: The average of the highest 36 consecutive months of Earnings.
   (c) Credited Service: All service including unused sick leave from the date of employment to retirement, death, or termination, except that service on and after April 1, 1981, is counted only if the employee makes contributions to the Plan.
   (d) Covered Compensation: The amount specified in Table 1 of Attachment 1, as amended from time to time, of Internal Revenue Service Notice 89-70 for the Plan Year in which the Participant attains his Social Security Retirement Age.

4. Retirement Dates:

   (a) Normal Retirement Date: The first day of the month following the later of Participant's 62nd birthday and completion of 5 years of Credited Service.

   (b) Early Retirement Date: A Participant may retire on the first day of a month before age 62 provided:

      (i) He has attained age 50 and has completed 20 years of Credited Service, or
      (ii) He has attained age 52 and has completed 5 years of Credited Service, or
      (iii) Attainment of age 50 and completion of 20 years of Credited Service on or after August 1, 1993 and prior to December 31, 1994, or on or after January 1, 1997, and is involuntarily separated from service or if the Employer shall have obtained a voluntary early retirement authority from the Assistant Secretary of the Army (Manpower and Reserve Affairs), or

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

(iv) Attainment of any age and completion of 25 years of Credited Service on or after August 1, 1993, and prior to December 31, 1994, or on or after January 1, 1997, and is involuntarily separated due to loss of position under a business-based action, per authority of the installation commander.

(c) Disability Retirement Date: A Participant who becomes permanently disabled and unable to perform his duties may retire, provided that he:

(i) Has attained age 52 with 1 year of Credited Service or has completed 5 years of Credited Service if hired before January 1, 2009, or

(ii) Has completed 5 years of Credited Service if hired on or after January 1, 2009.

(d) Deferred Retirement Date: A Participant may remain in employment beyond his Normal Retirement Date.

5. Pension Benefit at Normal Retirement:

(a) Participants Eligible: All Participants who retire on their Normal Retirement Date.

(b) Annual Benefit: The sum of (i), (ii), and (iii).

(i) 1.2% of Final Average Earnings plus 0.3% of Final Average Earnings in excess of Covered Compensation times Years of Credited Service not in excess of fifteen (15) years.

(ii) 1.6% of Final Average Earnings plus 0.3% of Final Average Earnings in excess of Covered Compensation times Years of Credited Service in excess of fifteen (15) years up to thirty (30) years.

(iii) 1.6% of Final Average Earnings times Years of Credited Service in excess of thirty (30) years.

But not less than the Participant's accrued benefit as of June 30, 1990 under the prior formula.

6. Pension Benefit at Early Retirement:

(a) Participants Eligible: All Participants who retire on an Early Retirement Date.

(b) Annual Benefit: Calculated as in item (5) based on Final Average Earnings and Credited Service at the time of early retirement, reduced by 4% for each year that early retirement precedes Normal Retirement Date. For retirement after attainment of age 55 and completion of 30 years of Credited Service, or after attainment of age 60 and completion of 20 years of Credited Service, no reduction in benefit is applicable.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

(c) A Participant who retires on an Early Retirement Date shall receive an annual early retirement supplement payable until the Participant attains his Normal Retirement Date. This benefit continues to the surviving spouse if the participant elected a married form of payment and dies. The amount of the annual supplement shall be (i) $192 or (ii) one-half percent (0.5%) of the Participant's Final Average Earnings whichever is less, times Years of Credited Service up to twenty-five (25) but shall not exceed $4,800 per year. This annual supplement is increased by any Cost-of-Living Adjustments thereafter.

(d) A Participant who retires on an Early Retirement Date as described in item 4(b)(iii) and (iv) above shall receive a benefit calculated as in item (5) based on Final Average Earning and Credited Service at the time of early retirement, reduced by 2% for each year that early retirement precedes age 55.

7. Pension Benefit at Disability Retirement:

(a) Participants Eligible: All Participants who retire on a Disability Retirement Date.

(b) Annual Benefit: The sum of (i) and (ii)

(i) 1.2% of Final Average Earnings times Years of Credited Service up to fifteen (15).

(ii) 1.6% of Final Average Earnings time Years of Credited Service in excess of fifteen (15).

The annual benefit shall not exceed 90% of Final Average Earnings when combined with Workers' Compensation.

8. Pension Benefit at Deferred Retirement:

(a) Participants Eligible: All Participants who retire on a Deferred Retirement Date.

(b) Annual Benefit: Calculated as in item (5) based on Final Average Earnings, Covered Compensation, and Credited Service at the time of actual retirement.

9. Vested Benefits:

(a) Participants Eligible: All Participants who complete 5 years of Credited Service.

(b) Annual Benefit: Calculated as in item (5) based on Final Average Earnings, Covered Compensation, and Credited Service at the time of termination of employment if Participant does not elect to have his contributions with interest returned to him.

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

10. Survivor Benefits:

(a) Participants Eligible: Any Participant who was retired on account of disability or who completed 5 years of Credited Service, and at the time of death, either:
(i) Was actively employed,
(ii) Was separated from active service entitled to a deferred benefit, but had not yet begun to receive retirement benefits, or
(iii) Retired under a disability benefit.

(b) Annual Benefit:
The eligible spouse survivor will receive the amount of benefit, including the early retirement supplement unreduced for early commencement that would have been paid had the Participant retired on the date of death and elected the normal form of payment for married participants.

If a Participant has retired on account of disability, his Spouse shall receive a benefit equal to the retirement benefit that would have been payable had the Participant retired at the time his disability commenced and elected the normal form of payment for married participants.

11. Employee Contribution:

(a) Annual Contribution: 2% of Earnings, which may be increased by 0.40% for the first year, and 0.25% each succeeding year, to a maximum rate of 3.40% if the actuarial value of the Trust assets is trending below 90% of the Trust liabilities. The trend is defined as twenty years from the date of the Actuary report.

(b) Interest Credited: 3% per annum.

(c) Benefit: Employees, or their beneficiaries if they are deceased, are eligible to receive a refund of their contributions plus interest in the form of a lump sum.

12. Forms of Benefit Payment:

(a) Normal Form: Reduced 55% joint and survivor annuity for married participants; life annuity for single participants. (For single participants, the excess of the retired Participant's contributions with interest over the sum of benefits paid is returned at his death in a lump sum payment to the retired Participant's beneficiary or estate).

SECTION IV – ANNUAL REPORT PRESCRIBED BY P.L. 95-595

13. Optional Forms: Actuarially Equivalent 5 or 10-years Certain and Continuous, Life Annuity, or a 100% Contingent Annuitant option.

14. Cost of Living Adjustments:

    Effective April 1, 1987, benefits paid to pensioners and beneficiaries as of April 1, 1987 were increased 0.25% for each month from the later of benefit commencement date or April 1, 1985 through December 1, 1986. Pensioners' benefits were previously increased in 1981, 1983, and 1985.

    Effective April 1, 1988, and each April 1 thereafter, each participant and beneficiary receiving retirement or survivor benefits from the Plan shall be entitled to have the benefit he or she is then receiving increased by the same percentage as the increase in the average Consumer Price Index – Urban Wage Earners and Clerical Workers (CPI-W) for the third quarter of the preceding year, or by four percent (4%), whichever is the lesser figure. For those years when the Consumer Price Index exceeds 4%, the Benefits Program Manager and the Trustees, upon review of the financial conditions of the Plan, may recommend to the Commander increases of more than 4%.

14. Changes in Plan Provisions since Prior Valuation:

    None