

I.A.M. National Pension Fund
Actuarial Valuation and Review as of January 1, 2023



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July 5, 2024

Board of Trustees
I.A.M. National Pension Fund
99 M Street SE
Washington, DC 20003

Dear Trustees:

We are pleased to submit the Actuarial Valuation and Review as of January 1, 2023, for the I.A.M. National Pension Fund. It establishes the funding requirements for the current year and includes the actuarial information that is required to be filed with the Form 5500 for the plan year.

The actuarial valuation results are dependent on a single set of assumptions, and there is a risk that future experience may differ significantly from the current assumptions. For this reason, we regularly review projections under various scenarios with the Trustees. This valuation is based on financial and participant census data provided by the Fund Office. The actuarial calculations included in this valuation were performed under the supervision of Adam Condrick, FCA, MAAA, EA.

We look forward to reviewing this report with you at your next meeting and to answering any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "Jason Russell".

Jason Russell, FSA, MAAA, EA
Senior Vice President and Actuary

A handwritten signature in black ink, appearing to read "Josh Timm".

Josh Timm, CEBS
Senior Vice President and Benefits Consultant

cc: Yolanda Montgomery
Denise Clark

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Section 1: Trustee Summary

Commentary

This actuarial valuation as of January 1, 2023 is based on financial and demographic information as of that date. The valuation is also based on actuarial assumptions about future events and does not reflect experience that has emerged since the measurement date. We will continue to prepare projections to help the Trustees understand how short-term fluctuations in financial markets or employment levels can affect long-term funding results. This actuarial valuation will serve as the basis for these projections.

The Fund Office has been transitioning to a new recordkeeping system, which delayed the delivery of the participant census data needed to complete the actuarial valuation, which in turn delayed completion of this valuation report as of January 1, 2023. We are working with the Fund Office to return to the regular schedule of reporting preliminary valuation results to the Trustees around September of a given plan year and completing the actuarial valuation report by the end of the plan year. We do not anticipate achieving this timing for the actuarial valuation as of January 1, 2024, but we are aiming to return to that schedule in 2025.

Actuarial Experience

Experience for the plan year ending December 31, 2022 was unfavorable. The net investment return on the market value of assets was -9.92%, resulting in a market value loss of over \$2.5 billion relative to the actuarial assumption of 6.85%. Due to asset smoothing, only one-fifth of this net investment loss will be recognized in the actuarial valuation of assets as of January 1, 2023; the rest will be recognized over the next four plan years.

There was also a net experience loss of about \$3.0 million due to higher administrative expenses and an experience loss of \$89.7 million due to a higher actuarial accrued liability than expected. The loss on the actuarial accrued liability represents about 0.5% of the expected amount and was due to unfavorable demographic trends. Most notably, there were continued retirements with subsidized early or disability retirement benefits that were eliminated under the Rehabilitation Plan Preferred Schedule, either due to delayed reporting or a collective bargaining agreement that expires after January 1, 2022. Other factors contributing to the loss include proper reflection of beneficiary benefit forms of payment and identification of dates of birth for 1,900 active participants for whom this information was previously unknown. These losses were partially offset by greater net turnover than projected.

Due to this unfavorable experience, the actuarial accrued liability (based on the unit credit cost method) decreased from 93.3% funded as of January 1, 2022 to 79.6% funded as of January 1, 2023, based on the market value of assets. Based on the actuarial

Section 1: Trustee Summary

value of assets, which smooths investment gains and losses over five years, the funded percentage decreased from 86.9% as of January 1, 2022 to 86.5% as of January 1, 2023.

Actuarial Assumptions and Methods

The actuarial assumptions for the actuarial valuation as of January 1, 2023 have been updated from those used in the actuarial valuation as of January 1, 2022. We have updated the assumed rates of retirement, termination, and incidence of disability to reflect the changes in benefits under the Rehabilitation Plan Preferred Schedule that took effect on January 1, 2022. In addition, we increased the assumed administrative expenses and changed the mortality assumption to a current table and a more reasonable projection scale. We will continue to monitor demographic experience as it emerges. The net effect of the assumption changes was a decrease in the actuarial accrued liability (based on the unit credit cost method) of about \$190 million, or about 1.1%.

We are evaluating the actuarial interest rate assumption of 6.85% considering changes in the interest rate environment and capital market expectations, as well as possible adjustments to the Plan's investment allocation. We will continue to discuss this assumption with the Board of Trustees as we evaluate its reasonableness for the actuarial valuation as of January 1, 2024.

This actuarial valuation as of January 1, 2023 reflects a change in the actuarial cost method from the "entry age normal" method to the "unit credit" method. The cost method is a mechanism for allocating costs to past service and future service, and the Board of Trustees approved the change to the unit credit method at their July 2023 meeting. This change reduced the actuarial accrued liability as of January 1, 2023 by a little more than \$1.3 billion, but it also increases future normal costs.

Plan Provisions

This actuarial valuation as of January 1, 2023 reflects the provisions of the Rehabilitation Plan adopted by the Board of Trustees, which took effect on April 17, 2019. This valuation reflects progress by the bargaining parties toward adoption (or imposition) of the Schedules under the Rehabilitation Plan as of January 1, 2023. There were no other changes in plan provisions versus the actuarial valuation as of January 1, 2022.

Actuarially Determined Contribution

Actuarial Standards of Practice require the calculation and disclosure of an Actuarially Determined Contribution (ADC) when performing a funding valuation for a pension plan in the United States. The ADC represents an annual contribution amount that will cover the cost of benefit accruals and administrative expenses during the plan year, as well as pay down any unfunded actuarial

Section 1: Trustee Summary

accrued liability over a reasonable period of time. An ADC should balance benefit security, intergenerational equity, and stability or predictability of annual costs.

The Scheduled Cost measurement shown later in this report represents an ADC and amortizes the unfunded actuarial accrued liability as of January 1, 2023 over a period of 10 years. There is a shortfall of about \$180.4 million between projected contributions for the plan year (\$554.6 million) and the Scheduled Cost for (\$735.0 million). This shortfall indicates that the unfunded liability is not projected to be amortized over a period of 10 years.

It is important to keep in mind that Scheduled Cost does not directly address the funding rules and requirements under the Pension Protection Act of 2006 (“PPA”). For example, depending on the circumstances, PPA may permit the Plan to take longer than 10 years to amortize its unfunded liability. We will continue to work with the Trustees to evaluate long-term funding scenarios to determine whether the Plan is projected to meet its requirements under PPA.

Pension Protection Act

The Board of Trustees elected to enter critical status (the “red zone”) under PPA early in the plan year beginning January 1, 2019 and adopted a Rehabilitation Plan. The Plan has remained in critical status since then, including for the plan years beginning January 1, 2023 and January 1, 2024. As noted above, we will continue to work with the Trustees to monitor whether the Plan is meeting its requirements under PPA, and we will advise whether changes to the Rehabilitation Plan would be appropriate.

Low-Default-Risk Obligation Measure

The Actuarial Standards of Practice require the calculation and disclosure of a Low-Default-Risk Obligation Measure (LDRM) when performing a funding valuation. The LDRM represents the plan’s actuarial accrued liability measured using discount rates associated with fixed income securities with a high credit rating that would be expected to provide cash flows with approximately the same timing and magnitude as the plan’s expected future benefit payments.

In general, if plan assets were invested exclusively in low-default-risk securities, the funded status would be lower and the annual costs would be higher. While investing in a portfolio with low-default-risk securities would likely to reduce investment volatility, it would also result in the need to increase employer contributions or reduce participant benefits.

The “current liability” measurement shown later in this report is a required calculation under IRS rules and is an acceptable LDRM. As of January 1, 2023, the Plan’s current liability is \$29.62 billion. This amount is based on a prescribed mortality assumption, as well

Section 1: Trustee Summary

as a prescribed interest rate of 2.55% that approximates yields on high quality corporate bonds. Based on the market value of assets of January 1, 2023, the Plan's current liability is 45.7% funded. To contrast, the actuarial accrued liability is 79.6% funded.

It is important to keep in mind that market interest rates have increased since January 1, 2023. Reflecting current market interest rates would significantly reduce the amount of the LDRM. It is also important to keep in mind that the amount of the LDRM would change if a plan-specific mortality assumption were used instead of prescribed mortality assumptions.

Risk

The actuarial valuation results are dependent on a single set of assumptions. There is a risk that emerging results may differ significantly if actual experience proves to be different from these current assumptions. Key risk factors include:

- **Investment returns:** both near-term volatility and longer-term underperformance
- **Contributions:** declining employment or contribution levels
- **Withdrawal liability:** withdrawn employers unable to satisfy their full withdrawal liability obligations
- **Longevity:** participants living longer than assumed
- **Subsidized early retirement:** participants continuing to retire with early retirement subsidies eliminated effective January 1, 2022 under the Rehabilitation Plan Preferred Schedule because their collective bargaining agreement expires after that date
- **Population aging:** participants working longer than expected, increasing the average age of the active population
- **Plan maturity:** increasing number of non-active participants relative to the number of active participants; with increased demographic maturity and negative cash flows, the Plan is more susceptible to investment volatility

We have reviewed various scenarios with the Trustees to help them evaluate whether the Plan is projected to meet its funding requirements under PPA. Most of these scenarios have focused on investment volatility. A more detailed risk assessment could help the Trustees better understand and manage the non-investment risk factors facing the Plan.

Withdrawal Liability

This actuarial valuation report also includes the calculation of the unfunded vested benefits as of December 31, 2022, which is used to determine withdrawal liability for employer withdrawals during the plan year beginning January 1, 2023. The unfunded vested benefits increased from \$4.75 billion as of December 31, 2021 to \$7.23 billion as of December 31, 2022. The increase was due to the unfavorable experience for 2022 described earlier.

Section 1: Trustee Summary

Summary of Key Valuation Results

Valuation Result	Prior	Current
Plan Year Beginning	January 1, 2022	January 1, 2023
Certified Zone Status	Critical	Critical
Demographic Data		
• Number of active participants	86,635	85,478
• Number of inactive participants with vested rights	83,504	82,091
• Number of retired participants and beneficiaries	116,119	119,453
• Total number of participants	286,258	287,022
• Participant ratio: non-active to actives	2.30	2.36
Asset Values		
• Market value of assets (MVA)	\$15,368,797,625	\$13,374,935,607
• Actuarial value of assets (AVA)	14,315,653,162	14,533,279,178
• Market value net investment return, prior year	12.77%	-9.92%
• Actuarial value net investment return, prior year	10.05%	5.13%
Cash Flow		
• Plan Year	Actual 2022	Projected 2023
• Contributions	\$533,170,453	\$546,495,046
• Withdrawal liability payments	24,367,478	8,098,870
• Benefit payments	-1,014,521,188	-1,083,490,691
• Administrative expenses	-43,395,382	-44,500,000
• Net cash flow	-\$500,378,639	-\$573,396,776
• Cash flow as a percentage of MVA	-3.3%	-4.3%

Section 1: Trustee Summary

Summary of Key Valuation Results

Valuation Result	Prior	Current
Plan Year Beginning	January 1, 2022	January 1, 2023
Actuarial Liabilities		
• Valuation interest rate	6.85%	6.85%
• Actuarial Cost Method	Entry Age Normal	Unit Credit
• Normal cost, including administrative expenses	\$278,083,009	\$414,089,723
• Actuarial accrued liability	17,861,305,234	16,807,351,487
• Unfunded actuarial accrued liability (based on AVA)	3,545,652,072	2,274,072,309
Funded Percentages		
• Actuarial accrued liability under unit credit method	\$16,467,155,392	\$16,807,351,487
• MVA funded percentage	93.3%	79.6%
• AVA funded percentage (PPA basis)	86.9%	86.5%
Statutory Funding Information		
• Credit balance at the end of prior Plan Year	\$1,462,286,959	\$1,363,841,304
• Minimum required contribution	0	0
• Maximum deductible contribution	29,217,809,115	27,962,127,542
Scheduled Cost		
• Interest rate	6.85%	6.85%
• Projected contributions amount	\$531,130,422	\$554,593,916
• Scheduled Cost amount	774,434,985	735,008,011
• Margin or (deficit)	-243,304,563	-180,379,905
Withdrawal Liability		
• Measurement date	December 31, 2022	December 31, 2023
• Interest rate	5.75%	5.75%
• Present value of vested benefits	20,117,066,894	20,607,437,193
• Market value of assets	15,368,797,625	13,374,935,607
• Unfunded present value of vested benefits	\$4,748,269,269	\$7,232,501,586

Section 2: Certificate of Actuarial Valuation

Actuarial Statement

This is to certify that Segal has prepared an actuarial valuation of the I.A.M. National Pension Fund as of January 1, 2023 in accordance with generally accepted actuarial principles and practices. It has been prepared at the request of the Board of Trustees to assist in administering the Fund and meeting filing requirements of federal government agencies. This valuation report may not otherwise be copied or reproduced in any form without the consent of the Board of Trustees and may only be provided to other parties in its entirety.

The measurements shown in this actuarial valuation may not be applicable for other purposes. Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the Plan's funded status); and changes in plan provisions or applicable law.

The valuation is based on the assumption that the Plan is qualified as a multiemployer plan for the year and on information supplied by the auditor with respect to contributions and assets and reliance on the Plan Administrator with respect to the participant data. Segal does not audit the data provided. The accuracy and comprehensiveness of the data is the responsibility of those supplying the data. To the extent we can, however, Segal does review the data for reasonableness and consistency. Based on our review of the data, we have no reason to doubt the substantial accuracy of the information on which we have based this report and we have no reason to believe there are facts or circumstances that would affect the validity of these results.

I am a member of the American Academy of Actuaries and I meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein. To the best of my knowledge, the information supplied in this actuarial valuation is complete and accurate, except as shown in Exhibit F. Each prescribed assumption for the determination of Current Liability was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the Plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the Plan. In addition, in my opinion, the combined effect of these assumptions is expected to have no significant bias.



Adam Condrick, FCA, MAAA
Vice President and Consulting Actuary
Enrolled Actuary No. 23-06512
Date: July 5, 2024

Section 2: Certificate of Actuarial Valuation

Exhibit A: Participant Data

The following exhibit summarizes participant census data on which this valuation is based.

Category	Year Ended December 31		Change from Prior Year
	2021	2022	
Active participants in valuation:			
• Number	86,635	85,478	-1.3%
• Average age	47.8	46.9	-0.9
• Average pension credits	9.9	9.8	-0.1
• Average benefit-bearing contribution rate per hour	\$2.6986	\$2.7859	3.2%
Inactive participants, including deferred beneficiaries, with rights to a pension:			
• Number ¹	83,504	82,091	-1.7%
• Average monthly benefit	\$442	\$476	7.7%
Pensioners and beneficiaries:			
• Number in pay status	116,119	119,453	2.9%
• Average monthly benefit	\$700	\$712	1.7%
Total participants	286,258	287,022	0.3%

¹ Excludes 548 and 497 inactive vested members over the age of 80 in 2022 and 2021, respectively

Section 2: Certificate of Actuarial Valuation

Exhibit B: Actuarial Liabilities

The following exhibit summarizes the actuarial liabilities and asset values for the plan year.

Description	Year Beginning January 1	
	2022	2023
Interest rate assumption	6.85%	6.85%
Actuarial cost method	Entry Age Normal	Unit Credit
Normal cost	\$278,083,009	\$414,089,723
• Cost of benefit accruals	239,083,009	369,589,723
• Administrative expenses	39,000,000	44,500,000
Actuarial accrued liability	\$17,861,305,234	\$16,807,351,487
• Pensioners and beneficiaries ¹	\$9,555,827,001	\$10,006,935,404
• Inactive participants with vested rights ²	2,550,324,470	2,723,478,988
• Active participants	5,755,153,763	4,076,937,095

¹ Includes liabilities for former spouses in pay status

² Includes liabilities for former spouses with deferred benefits

Section 2: Certificate of Actuarial Valuation

Exhibit C: Financial Information

The following exhibit summarizes the financial information on which this valuation is based.

Item	Income and Expenses	Assets for YE December 31, 2021	Income and Expenses	Assets for YE December 31, 2022
Market value of assets, beginning of the year		\$14,062,264,971		\$15,368,797,625
Contribution income:				
• Employer contributions	\$507,162,457		\$533,170,453	
• Withdrawal Liability Payments	25,156,709		24,367,478	
Contribution income		532,319,166		557,537,931
Investment income:				
• Investment income:	1,799,129,272		-1,458,339,460	
• Less investment fees	-40,122,321		-35,233,944	
Net investment income		1,759,006,951		-1,493,573,404
Other income		113,285		90,025
Less benefit payments and expenses:				
• Pension benefits	-944,603,550		-1,014,521,188	
• Administrative expenses	-40,303,198		-43,395,382	
Total benefit payments and expenses		-984,906,748		-1,057,916,570
Market value of assets, end of the year		\$15,368,797,625		\$13,374,935,607

Section 2: Certificate of Actuarial Valuation

Exhibit D: Actuarial Value of Assets

The following exhibit summarizes the development of the actuarial valuation of assets.

Step	MVA Rate of Return	Original Amount ¹	Unrecognized Return ²	Amount
1. Market value of assets, December 31, 2022				\$13,374,935,607
2. Calculation of unrecognized return				
a. Year ended December 31, 2022	-9.92%	-\$2,524,837,838	-\$2,019,870,270	
b. Year ended December 31, 2021	0.00%	754,529,929	452,717,957	
c. Year ended December 31, 2020	0.00%	629,580,607	251,832,242	
d. Year ended December 31, 2019	0.00%	784,882,499	156,976,500	
e. Year ended December 31, 2018	0.00%	-1,210,904,222	0	
f. Total unrecognized return				-1,158,343,571
3. Preliminary actuarial value: 1 - 2f				14,533,279,178
4. Adjustment to be within 20% corridor				0
5. Final actuarial value of assets as of December 31, 2022: (3) + (4)				14,533,279,178
6. Actuarial value as a percentage of market value: (5) ÷ (1)				108.7%
7. Amount deferred for future recognition: (1) - (5)				-\$1,158,343,571

¹ Total return minus expected return on a market value basis

² Recognition at 20% per year over five years

Section 2: Certificate of Actuarial Valuation

Exhibit E: Statutory Disclosures

The following exhibits summarize key information for statutory disclosures regarding the Plan's funded status for the plan year beginning January 1, 2023: the actuarial status certification and the annual funding notice.

Actuarial Status Certification

Item	Amount
Plan status (as certified on March 29, 2023, for the 2023 zone certification)	Critical
Actuarial value of assets for FSA	\$14,533,279,178
Accrued liability under unit credit cost method	16,807,351,487
Funded percentage for monitoring plan status	86.5%
Year plan projected to emerge from critical status (based on terms of the Rehabilitation Plan)	2032

Annual Funding Notice

Item	2023 Plan Year	2022 Plan Year	2021 Plan Year
Actuarial valuation date	January 1, 2023	January 1, 2022	January 1, 2021
Funded percentage	86.5%	86.9%	83.7%
Value of assets	\$14,533,279,178	\$14,315,653,162	\$13,445,708,809
Value of liabilities	16,807,351,487	16,467,155,392	16,064,688,146
Market value of assets as of Plan Year end*	Not available	13,521,087,370	15,522,432,633

*Includes outstanding withdrawal liability receivables.

Critical or Endangered Status

The Plan was in critical (but not "critical and declining") status in the Plan Year because there was a projected funding deficiency in the Funding Standard Account, but no insolvency was projected within twenty years. In an effort to improve the Plan's funding situation, the Trustees adopted a Rehabilitation Plan that decreased benefits and required increased contribution rates.

Section 2: Certificate of Actuarial Valuation

Exhibit F: Schedule of Active Participant Data

(Schedule MB, Line 8b(2))

The following schedule of active participant data is as of December 31, 2022.

Pension Credits

Age	Total	1 - 4	5 - 9	10 -14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 & over
Under 20	93	93	-	-	-	-	-	-	-	-
	\$134	\$134	-	-	-	-	-	-	-	-
20 - 24	2,651	2,582	69	-	-	-	-	-	-	-
	\$230	\$221	\$549	-	-	-	-	-	-	-
25 - 29	6,813	5,174	1,612	27	-	-	-	-	-	-
	\$359	\$267	\$646	\$981	-	-	-	-	-	-
30 - 34	9,162	5,116	3,265	746	35	-	-	-	-	-
	\$502	\$287	\$684	\$1,148	\$1,274	-	-	-	-	-
35 - 39	9,233	3,802	3,015	1,697	709	10	-	-	-	-
	\$679	\$288	\$698	\$1,151	\$1,541	-	-	-	-	-
40 - 44	9,068	3,095	2,539	1,821	1,279	323	11	-	-	-
	\$855	\$284	\$687	\$1,152	\$1,665	\$2,748	-	-	-	-
45 - 49	9,655	2,634	2,342	1,968	1,955	570	183	3	-	-
	\$1,001	\$289	\$671	\$1,129	\$1,529	\$2,799	\$2,830	-	-	-
50 - 54	11,192	2,366	2,459	2,365	2,663	816	352	150	21	-
	\$1,134	\$283	\$659	\$1,158	\$1,453	\$2,698	\$3,299	\$2,489	\$2,525	-
55 - 59	12,951	1,946	2,336	2,945	3,873	962	426	356	96	11
	\$1,185	\$280	\$642	\$1,123	\$1,365	\$2,399	\$2,872	\$2,572	\$2,436	-
60 - 64	10,722	1,201	1,735	2,624	3,444	912	287	343	70	106
	\$1,221	\$276	\$614	\$1,134	\$1,338	\$2,145	\$2,635	\$2,763	\$2,571	\$2,529
65 - 69	3,229	307	577	827	1,016	247	80	117	18	40
	\$1,195	\$274	\$574	\$1,102	\$1,291	\$2,111	\$2,519	\$2,945	-	\$2,528
70 & over	646	89	122	145	207	38	12	21	4	8
	\$1,082	\$243	\$573	\$1,014	\$1,263	\$1,866	-	\$3,089	-	-
Unknown	63	55	5	-	2	-	-	1	-	-
	\$282	\$231	-	-	-	-	-	-	-	-
Total	85,478	28,460	20,076	15,165	15,183	3,878	1,351	991	209	165
	\$902	\$275	\$664	\$1,137	\$1,422	\$2,466	\$2,893	\$2,679	\$2,534	\$2,534

Section 2: Certificate of Actuarial Valuation

Exhibit G: Funding Standard Account

- ERISA imposes a minimum funding standard that requires the Plan to maintain an FSA. The accumulation of contributions in excess of the minimum required contributions is called the FSA credit balance. If actual contributions fall short on a cumulative basis, a funding deficiency has occurred.
- The FSA is charged with the normal cost and the amortization of increases or decreases in the unfunded actuarial accrued liability due to plan amendments, experience gains or losses, and changes in actuarial assumptions and funding methods. The FSA is credited with employer contributions and withdrawal liability payments.
- Increases or decreases in the unfunded actuarial accrued liability are amortized over 15 years except that short-term benefits, such as 13th checks, are amortized over the scheduled payout period.
- Employers contributing to plans in critical status will generally not be subject to the excise tax if a funding deficiency develops, provided the parties fulfill their obligations under the Rehabilitation Plan, including negotiation of bargaining agreements consistent with Schedules provided by the Trustees.

Item	December 31, 2022	December 31, 2023
1. Prior year funding deficiency	\$0	\$0
2. Normal cost, including administrative expenses	278,083,009	414,089,723
3. Amortization charges	1,052,009,398	1,067,884,654
4. Interest on 1, 2 and 3	91,111,330	101,515,245
5. Total charges	\$1,421,203,737	\$1,583,489,622
6. Prior year credit balance	\$1,462,286,959	\$1,363,841,304
7. Employer contributions	557,537,931	TBD
8. Amortization credits	606,035,682	740,718,303
9. Interest on 6, 7 and 8	159,184,469	144,162,333
10. Full funding limitation credits	0	0
11. Total credits	\$2,785,045,041	\$2,248,721,940
12. Credit balance/(Funding deficiency): 11 – 5	\$1,363,841,304	TBD
13. Minimum contribution to avoid a funding deficiency: 5 – 11, not less than zero	N/A	\$0

Section 2: Certificate of Actuarial Valuation

Full Funding Limitation (FFL) and Credits for Plan Year January 1, 2023

Item	Amount
ERISA FFL (accrued liability FFL)	\$5,567,255,670
RPA'94 override (90% current liability FFL)	12,848,141,340
FFL credit	0

Schedule MB, line 8e

Difference between minimum required contribution for the year and the minimum that would have been required without extending the amortization bases is \$0.

Section 2: Certificate of Actuarial Valuation

Schedule of FSA Bases (Charges) (Schedule MB, Line 9c)

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Benefit Level Increase	01/01/1992	\$2,776,674	4	\$764,603
Plan Amendment	01/01/1993	6,394,868	5	1,453,804
Experience Loss	01/01/1994	102,766,864	6	20,084,529
Benefit Level Increase	01/01/1995	23,276,917	7	4,021,101
Plan Amendment	01/01/1996	92,213,158	8	14,368,820
Plan Amendment	01/01/1997	109,276,250	9	15,597,156
Merger Base	01/01/1998	43,323,373	10	5,732,872
Plan Amendment	01/01/1998	119,347,824	10	15,792,995
Plan Amendment	01/01/1999	39,848,819	11	4,936,341
Plan Amendment	01/01/1999	53,386,190	11	6,613,307
Plan Amendment	01/01/1999	60,489,637	11	7,493,259
Plan Amendment	01/01/2000	81,225,660	12	9,494,500
Plan Amendment	01/01/2001	118,495,777	13	13,156,590
Plan Amendment	01/01/2002	48,942,243	14	5,190,513
Plan Amendment	01/01/2003	48,362,427	15	4,922,543
Experience Loss	01/01/2004	1,009,335	1	1,009,335
Plan Amendment	01/01/2004	124,483,387	16	12,210,435
Experience Loss	01/01/2005	13,007,236	2	6,718,990
Plan Amendment	01/01/2005	93,963,722	17	8,913,898
Plan Amendment	01/01/2006	57,978,220	18	5,336,004
Plan Amendment	01/01/2007	224,288,826	19	20,081,541
Change in Assumptions	01/01/2007	251,415,767	19	22,510,333
Plan Amendment	01/01/2008	42,544,892	5	9,672,123
Plan Amendment	01/01/2009	42,363,171	6	8,279,364

Section 2: Certificate of Actuarial Valuation

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Investment Loss subject to Relief	01/01/2009	1,536,287,013	15	156,370,140
Plan Amendment	01/01/2010	41,449,067	2	21,410,843
Plan Amendment	01/01/2011	18,282,981	3	6,502,270
Investment Loss subject to Relief	01/01/2011	798,593,448	15	81,284,401
Plan Amendment	01/01/2012	24,221,449	4	6,669,774
Experience Loss	01/01/2012	259,115,677	4	71,351,758
Plan Amendment	01/01/2013	2,635,882	5	599,239
Experience Loss	01/01/2013	4,918,450	5	1,118,157
Plan Amendment	01/01/2013	24,858,333	5	5,651,274
Plan Amendment	01/01/2014	2,828,883	6	552,871
Plan Amendment	01/01/2014	21,620,844	6	4,225,530
Experience Loss	01/01/2014	56,997,426	6	11,139,451
Plan Amendment	01/01/2015	1,834,097	7	316,841
Plan Amendment	01/01/2015	21,921,454	7	3,786,944
Plan Amendment	01/01/2015	37,081,952	7	6,405,929
Experience Loss	01/01/2015	152,604,119	7	26,362,451
Plan Amendment	01/01/2016	3,228,974	8	503,145
Plan Amendment	01/01/2016	35,847,531	8	5,585,827
Change in Assumptions	01/01/2016	100,355,652	8	15,637,598
Experience Loss	01/01/2016	395,827,483	8	61,678,548
Plan Amendment	01/01/2017	877,085	9	125,188
Plan Amendment	01/01/2017	5,829,708	9	832,083
Plan Amendment	01/01/2017	36,448,660	9	5,202,369
Experience Loss	01/01/2017	301,462,162	9	43,028,126
Plan Amendment	01/01/2018	3,441,080	10	455,349
Plan Amendment	01/01/2018	58,280,837	10	7,712,156

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Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Experience Loss	01/01/2018	331,308,941	10	43,841,273
Plan Amendment	01/01/2019	2,652,086	11	328,532
Plan Amendment	01/01/2019	41,459,201	11	5,135,830
Experience Loss	01/01/2019	255,871,572	11	31,696,534
Plan Amendment	01/01/2020	2,793,963	12	326,587
Plan Amendment	01/01/2020	44,269,634	12	5,174,696
Plan Amendment	01/01/2020	53,173,593	12	6,215,483
Experience Loss	01/01/2020	233,406,125	12	27,282,937
Change in Assumptions	01/01/2021	444,222,906	13	49,322,085
Plan Amendment	01/01/2021	3,469,200	13	385,185
Plan Amendment	01/01/2021	56,515,720	13	6,274,942
Plan Amendment	01/01/2022	21,328,261	14	2,261,944
Plan Amendment	01/01/2022	2,086,067	14	221,235
Change in Assumptions	01/01/2022	816,155,936	14	86,556,466
Experience Loss	01/01/2023	334,016,683	15	33,997,707
Subtotal with Amortization Extension		1,801,181,237		224,354,956
Subtotal without Amortization Extension		6,589,580,135		843,529,698
Total		\$8,390,761,372		\$1,067,884,654

Note: Beginning with the January 1, 2023 valuation, the increase in liability associated with new employers first entering the Fund is captured as part of the experience gain or loss rather than measured separately as a new plan amendment base.

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Schedule of FSA Bases (Credits) (Schedule MB, Line 9h)

Type of Base	Date Established	Outstanding Balance	Years Remaining	Amortization Amount
Change in Assumptions	01/01/1994	\$2,012,116	1	\$2,012,116
Change in Funding Method	01/01/1994	19,267,196	1	19,267,196
Change in Assumptions	01/01/2002	5,683,969	9	811,281
Change in Assumptions	01/01/2009	220,085	1	220,085
Experience Gain	01/01/2009	15,395,146	1	15,395,146
Change in Asset Method	01/01/2009	471,215,163	16	46,220,964
Experience Gain	01/01/2010	144,488,565	2	74,636,709
Investment Loss subject to Relief	01/01/2010	192,255,638	15	19,568,636
Plan Amendment	01/01/2011	86,784,729	3	30,864,648
Experience Gain	01/01/2011	288,117,260	3	102,467,771
Change in Assumptions	01/01/2012	118,801,216	4	32,713,866
Plan Amendment	01/01/2021	983,162	13	109,161
Experience Gain	01/01/2021	176,494,568	13	19,596,198
Experience Gain	01/01/2022	224,724,749	14	23,832,921
Plan Amendment	01/01/2022	1,435,841,188	14	152,276,463
Plan Amendment	01/01/2023	43,333,437	15	4,410,670
Change in Funding Method	01/01/2023	1,337,989,912	10	177,052,816
Change in assumptions	01/01/2023	189,239,660	15	19,261,656
Total		\$4,752,847,759		\$740,718,303

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Exhibit H: Scheduled Cost

- The Scheduled Cost is an annual contribution objective, reflecting benefit levels and current assets that is compared to projected contributions to assess the Plan's long-term financial position.
- The Scheduled Cost represents a reasonable Actuarially Determined Contribution (ADC), as defined in the Actuarial Standards of Practice. An ADC should balance benefit security, intergenerational equity, and stability or predictability of annual costs.
- The Scheduled Cost amount, if contributed, would result in a predictable level that amortizes any unfunded actuarial accrued liability over 13.0 years, providing benefit security to plan participants while balancing the needs of current and future participants.
- The Schedule Cost for 2023 included projected movement to the preferred schedule for all employers not on a schedule.

Scheduled Cost

Cost Element	2022	2023
Normal cost*	247,774,172	\$382,016,167
Administrative expenses*	40,417,731	46,117,667
Amortization of the unfunded actuarial accrued liability*	486,243,082	306,874,177
Actuarial accrued liability	17,861,305,234	16,770,985,179
Actuarial value of assets	14,315,653,162	14,533,279,178
Unfunded actuarial accrued liability	3,545,652,072	2,237,706,001
Amortization period	10	10
Annual Scheduled Cost, payable monthly	\$774,434,985	\$735,008,011
Projected contributions ¹	531,130,422	554,593,916
Number of active participants	86,635	85,478
Hours assumption	2,000	2,000
Ultimate negotiated contribution rate	\$2.97	\$3.20
Margin/(deficit)	-\$243,304,563	-\$180,414,095
Margin/(deficit) as a % of projected contributions	-45.8%	-32.5%

* Includes adjustment for monthly payments

¹ Includes projected withdrawal liability payments for the coming year.

Section 2: Certificate of Actuarial Valuation

Exhibit I: Current Liability

The table below presents the current liability for the Plan Year beginning January 1, 2023.

Item ¹	Number of Participants	Current Liability
Interest rate assumption		2.55%
Retired participants and beneficiaries receiving payments	119,453	\$14,756,925,696
Inactive vested participants	82,091	5,711,932,003
Active participants		
• Non-vested benefits		598,320,890
• Vested benefits		8,552,253,409
• Total active	85,478	\$9,150,574,299
Total	287,022	\$29,619,431,998

Item	Amount
Expected increase in current liability due to benefits accruing during the Plan Year	\$928,545,413
Expected release from current liability for the Plan Year	1,084,005,603
Expected plan disbursements for the Plan Year, including administrative expenses of \$44,500,000	1,128,505,603
Current value of assets ²	\$13,521,087,370
Percentage funded for Schedule MB	45.65%

¹ The actuarial assumptions used to calculate these values are shown in Exhibit L.

² Includes withdrawal liability receivables

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Exhibit J: Accounting Information

The actuarial present value of accumulated plan benefits calculated in accordance with FASB ASC 960 is shown below as of January 1, 2022 and as of January 1, 2023. In addition, a reconciliation between the two dates follows.

Item	January 1, 2022	January 1, 2023
Actuarial present value of vested accumulated plan benefits:		
• Participants currently receiving payments	\$9,555,827,001	\$10,006,935,404
• Other vested benefits	6,715,548,303	6,623,461,592
• Total vested benefits	\$16,271,375,304	\$16,630,396,996
Actuarial present value of non-vested accumulated plan benefits	195,780,088	176,954,491
Total actuarial present value of accumulated plan benefits	\$16,467,155,392	\$16,807,351,487

Factors	Change in Actuarial Present Value of Accumulated Plan Benefits
Plan amendments	-\$43,333,437
Benefits accumulated, net experience gain or loss, changes in data	496,933,199
Benefits paid	-1,014,521,188
Changes in actuarial assumptions	-189,239,660
Interest	1,090,357,181
Total	\$340,196,095

Note: Does not include the accumulated present value of expenses, which is estimated to be \$569,343,066 as of January 1, 2022 and \$649,635,037 as of January 1, 2023.

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Exhibit K: Withdrawal liability

The following exhibit summarizes the valuation of the unfunded vested benefits as of December 31, 2022, which is used to calculate withdrawal liability for employer withdrawals during the plan year beginning January 1, 2023 and ending December 31, 2023. For comparison, the exhibit shows the unfunded vested benefits as of the prior year.

Reductions in accrued benefits for a plan in critical status are disregarded in determining an employer's allocation of the UVB through the establishment of an Affected Benefits pool. The pool is calculated using the method based on the PBGC's Technical Update 10-3, which describes how to account for the effect of benefit reductions that are implemented as part of a Rehabilitation Plan ("Affected Benefits") when a pension plan is in critical status.

Measurement Date	December 31, 2021 ¹	December 31, 2022
1 Actuarial Interest Rate	5.75%	5.75%
2 Present Value of Vested Benefits	\$19,436,088,828	\$19,068,953,376
3 Unamortized Balance of Affected Benefits ²	714,957	860,222,947
4 Present Value of Future Administrative Expenses	680,263,109 ³	678,260,870
5 Present Value of Vested Benefits Including Administrative Expenses (1 + 2 + 3)	20,117,066,984	20,607,437,193
6 Market Value of Assets	15,368,797,625	13,374,935,607
7 Unfunded Present Value of Vested Benefits (not less than \$0)	\$4,748,269,269	\$7,232,501,586

The actuarial assumptions and methods used to determine the unfunded vested benefits as of December 31, 2022 are the same as those used in the actuarial valuation as of January 1, 2022, published on October 5, 2023, except for the following:

- **Interest rate:** 5.75% per annum
- **Future administrative expenses:** Included in the above determination assuming no projected increase.
- **Asset method:** Market value of assets

¹ The results as of December 31, 2021 were determined by the prior actuary.

² Initial Affected Benefit amounts are amortized over 15 years, per PBGC Technical Update 10-3.

³ The present value of expected administrative expenses in 2021 was calculated as 3.5% of the Present Value of Vested Benefits by the prior plan actuary.

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Exhibit L: Statement of actuarial assumptions, methods and models

(Schedule MB, Line 6)

Rationale for demographic and noneconomic assumptions

Assumptions for mortality, retirement, termination, and disability have been updated effective January 1, 2023 based on a review of recent experience, reflecting future expectations under the Rehabilitation Plan, and applying professional judgment. Other assumptions that were not updated remain reasonable for purposes of this actuarial valuation, based on a review of recent experience and applying professional judgment.

Mortality rates

- **Healthy lives:** 90% of PRI-2012 Blue Collar Employee and Healthy Retiree Amount Weighted Mortality Tables, projected generationally from 2012 with SSA 2023 scale.
- **Disabled lives:** 90% of PRI-2012 Disabled Retiree Amount Weighted Mortality Tables, projected generationally from 2012 with SSA 2023 scale.
- **Contingent survivor lives:** 90% of PRI-2012 Blue Collar Contingent Survivor Amount Weighted Mortality Tables, projected generationally from 2012 with SSA 2023 scale.

The underlying tables with the generational projection to the ages of participants as of the measurement date reasonably reflect the mortality experience of the Plan as of the measurement date.

These mortality tables were then adjusted to future years using the generational projection to reflect future mortality improvement between the measurement date and those years.

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Termination rates

Age	Years of Service					
	Less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5+
20	14.3%	10.1%	11.8%	12.3%	8.5%	5.3%
25	11.6	11.2	10.7	10.3	8.7	8.3
30	10.7	11.5	10.0	9.2	8.7	8.6
35	10.8	11.2	9.5	8.7	8.5	7.2
40	11.1	10.7	9.1	8.6	8.2	5.3
45	11.0	9.9	8.9	8.4	7.6	3.9
50	9.6	9.2	8.7	7.9	6.8	4.0
54	7.2	8.9	8.5	7.0	5.9	3.0

Withdrawal rates cut out at early retirement age.

Disability rates

None assumed.

Retirement rates for active participants

Age	Rate
55 - 58	3.0%
59 - 61	4.5
62 - 64	15.0
65 - 69	30.0
70	100.0

Description of weighted average retirement age

Age 64, determined as follows: The weighted average retirement age for each participant is calculated as the sum of the product of each potential current or future retirement age times the probability of surviving from current age to that age and then retiring at that age, assuming no other decrements. The overall weighted retirement age is the average of the individual retirement ages based on all the active participants included in the January 1, 2023 actuarial valuation.

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Retirement rates for inactive vested participants

Age	Rate
55	6.45%
56	3.50
57	3.55
58	3.50
59	4.65
60	4.65
61	8.45
62	15.10
63	7.80
64	15.60
65	23.45
66	11.45
67	8.30
68	6.00
69	29.55
70	100.00

Future benefit accruals

One service credit per year per active employee included in the valuation.

Unknown data for participants

Same as those exhibited by participants with similar known characteristics. If not specified, participants are assumed to be male.

Definition of active participants

Active participants are defined as those with at least 450 hours in covered employment during the most recent plan year and had at least one pension credit by the end of the year, excluding those who have retired as of the valuation date.

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Exclusion of inactive vested participants

Inactive participants over age 80 are excluded from the valuation.

Percent married

70% of males and females.

Age of spouse

Spouses of male participants are three years younger, and spouses of female participants are three years older.

Benefit election

85% of married male participants and 65% of married female participants are assumed to elect the 50% joint and survivor annuity. The remaining participants are assumed to elect a life annuity (guarantee period based on applicable Rehabilitation Plan schedule).

Delayed retirement factors

Active participants are assumed to work enough hours each month to not qualify for delayed retirement adjustment. Inactive vested participants who are assumed to commence receipt of benefits after attaining normal retirement age qualify for delayed retirement increases.

Net investment return

6.85%. The net investment return assumption is a long-term estimate derived from historical data, current and recent market expectations, and professional judgment. As part of the analysis, a building block approach was used that reflects inflation expectations and anticipated risk premiums for each of the portfolio's asset classes as provided by Segal Marco Advisors, as well as the Plan's target asset allocation.

Annual administrative expenses

\$44,500,000 payable at the beginning of the year for the year beginning January 1, 2023.

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Actuarial value of assets

The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the projected return (at the actuarially assumed rate) on the market value and is recognized over a five-year period. The actuarial value is further adjusted, if necessary, to be within 20% of the market value.

Actuarial cost method

Traditional unit credit method. The normal cost and actuarial accrued liability are calculated on an individual participant basis.

Benefits valued

Unless otherwise indicated, includes all benefits summarized in Exhibit M.

Amortization extension

The IRS granted approval for an automatic five-year amortization extension under IRC Section 431(d) effective January 1, 2009.

Current liability assumptions

- **Interest:** 2.55%, within the permissible range prescribed under IRC Section 431(c)(6)(E)
- **Mortality:** Mortality prescribed under IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1(a)(2): RP-2006 employee and annuitant mortality tables, projected generationally using scale MP-2021 (previously, MP-2020)

Estimated rate of investment return

- **On actuarial value of assets (Schedule MB, line 6g):** 5.1%, for the Plan Year ending December 31, 2022
- **On current (market) value of assets (Schedule MB, line 6h):** -9.9%, for the Plan Year ending December 31, 2022

FSA contribution timing (Schedule MB, line 3a)

Unless otherwise noted, contributions are assumed to be paid periodically throughout the year pursuant to collective bargaining agreements. The interest credited in the Funding Standard Account is equivalent to a July 15 contribution date.

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Actuarial models

Segal valuation results are based on proprietary actuarial modeling software. The actuarial valuation models generate a comprehensive set of liability and cost calculations that are prepared to meet regulatory, legislative and client requirements. Deterministic cost projections are based on a proprietary forecasting model. Our Actuarial Technology and Systems unit, comprised of both actuaries and programmers, is responsible for the initial development and maintenance of these models. The models have a modular structure that allows for a high degree of accuracy, flexibility, and user control. The client team programs the assumptions and the plan provisions, validates the models, and reviews test lives and results, under the supervision of the responsible Enrolled Actuary.

Justification for change in actuarial assumptions (Schedule MB, line 11)

For purposes of determining current liability, the current liability interest rate was changed from 2.22% to 2.55% due to a change in the permissible range and recognizing that any rate within the permissible range satisfies the requirements of IRC Section 431(c)(6)(E) and the mortality tables and mortality improvement scales were changed in accordance with IRS Regulations 1.431(c)(6)-1 and 1.430(h)(3)-1.

Based on a review of recent experience, reflecting future expectations under the Rehabilitation Plan, and applying professional judgment, the following actuarial assumptions were updated effective January 1, 2023:

- Mortality for healthy lives: previously RP-2000 Healthy Mortality Tables with generational projection applied from base year 2000 using Scale BB
- Mortality for disabled lives: previously 1983 Railroad Retirement Board Disabled Life Mortality Table, with ages set back six years
- Annual administrative expenses: previously \$39,000,000
- Termination rates: previously 10% lower than the updated assumption
- Disability incidence: previously the sample rates shown below:

Age	Rate
20	0.02%
25	0.03
30	0.07
35	0.14
40	0.20
45	0.36

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Age	Rate
50	0.71
55	1.08
60	1.42

- Active retirement rates, previously the sample rates shown below:

Age	Years of Service		
	Less than 20	20 – 29	30+
47			5.8%
48			3.3
49			1.8
50			2.8
51			2.2
52			3.3
53			2.4
54			2.2
55	3.6%	3.8%	4.8
56	3.0	3.1	3.9
57	3.3	3.4	4.0
58	3.6	3.8	4.6
59	4.8	4.9	5.9
60	6.0	6.4	7.7
61	8.9	9.3	11.1
62	34.7	38.4	39.2
63	21.6	22.2	23.4
64	19.7	20.5	21.7
65	42.8	43.9	46.3
66	43.2	45.8	45.3
67	31.0	32.2	32.8
68	29.4	30.3	30.9
69	100.0	100.0	100.0

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- Percent married, previously Social Security awards during 1972

Change in actuarial cost method

As approved by the Board of Trustees, the actuarial cost method was changed from the entry age normal method to the traditional unit credit method effective January 1, 2023. This change is automatically approved under Revenue Procedure 2000-40.

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Exhibit M: Summary of Plan Provisions

(Schedule MB, Line 6)

This exhibit summarizes the major provisions of the Plan, included in the actuarial valuation. This exhibit is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions. Provisions that applied prior to the effective date of the Rehabilitation Plan (“RP”) are labeled as “Pre-RP.”

Effective date of Plan

January 1, 1971, last amended April 17, 2019

Plan year

January 1 through December 31

Pension credit year

January 1 through December 31

Participation

On the earliest January 1, or July 1 after completion of 1,000 hours during a 12-month period

Vesting Service

One year of Vesting Service is granted for each calendar year in which the employee works at least 600 hours.

Credited Service

Sum of Past Service Credit and Future Service Credit

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Past Service Credit

One year granted for each Plan year the employee worked at least 135 days under a Collective Bargaining Agreement between a participating Lodge and the employer. Past Service Credit is not available to new groups who joined the Fund on or after April 1, 2003.

Future Service Credit

Contribution Hours During Plan Year	Months of Future Service Credit
Less than 600 hours	0 Months
Exactly 600 hours	5
601 – 770	6
771 – 940	7
941 – 1,110	8
1,111 – 1,280	9
1,280 – 1,450	10
1,451 – 1,600	11
1,601 or more	12

RP Schedule Effective Date

Under the Rehabilitation Plan (“RP”), some benefit changes applied to all participants effective April 26, 2019. The effective date for other benefit changes depends on which schedule under the Rehabilitation Plan applies,

- **Preferred Schedule:** Benefit changes generally took effect January 1, 2022 (or upon adoption of the Preferred Schedule by the bargaining parties, if later) and apply both retroactively and prospectively
- **Default Schedule:** Benefit changes generally took effect on September 1, 2019 (or upon the adoption or imposition of the Default Schedule) and apply prospectively only

Normal Pension

- **Age Requirement:** 65
- **Service Requirement:** Five years of credited service
- **Amount, Pre-RP:** Monthly accrual rate per year of Future Service Credit based on hourly contribution rate (see table below)

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- **Amount, RP Preferred Schedule:** Monthly accrual rate for each year of Future Service Credit based on hourly contribution rate as of January 1, 2019 (see table below); future contribution rate increases required under the Rehabilitation Plan are not benefit-bearing
- **Amount, RP Default Schedule:** one percent (1%) of benefit-bearing contributions

Amount: Pre-RP and RP Preferred Schedule

Hourly Contribution Rate	Per Year of Future Service (Schedule B)	Hourly Contribution Rate	Per Year of Future Service (Schedule B)	Hourly Contribution Rate	Per Year of Future Service (Schedule B)
\$0.25	\$13.01	\$4.75	\$170.46	\$9.25	\$276.30
0.50	26.78	5.00	176.79	9.50	282.12
0.75	37.93	5.25	183.11	9.75	287.94
1.00	46.98	5.50	188.95	10.00	293.76
1.25	56.60	5.75	194.77	10.25	299.58
1.50	66.80	6.00	200.61	10.50	305.40
1.75	76.10	6.25	206.44	10.75	311.22
2.00	85.46	6.50	212.27	11.00	317.04
2.25	94.82	6.75	218.09	12.00	340.32
2.50	103.56	7.00	223.93	12.25	346.14
2.75	112.28	7.25	229.74	12.50	351.96
3.00	120.44	7.50	235.56	12.75	357.78
3.25	128.57	7.75	241.38	13.00	363.60
3.50	136.06	8.00	247.20	13.25	369.42
3.75	143.54	8.25	253.02	13.50	375.24
4.00	150.41	8.50	258.84	13.75	381.06
4.25	157.27	8.50	258.84	14.00	386.88
4.50	164.14	9.00	270.48	15.00	410.16

Note: The average benefit rate as of January 1, 2023 is \$108.34.

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30 & Out Unreduced Retirement

- **Service Requirement:** 30 years of credited service including 600 contribution hours earned in any plan year 1999 or later
- **Amount, Pre-RP:** Normal Pension amount
- **Amount, RP Preferred Schedule and RP Default Schedule:** Normal Pension reduced actuarially for each month by which the participant is younger than 65

Early Retirement

- **Age Requirement:** 55
- **Service Requirement:** Five years of credited service
- **Amount, Pre-RP:** Normal Pension accrued reduced by 4.8% for each year of age less than 65; if a participant works at least 600 hours in any plan year after 1993 and has 20 years of credited service, the benefit shall be reduced by 4.8% for each year of age less than 62
- **Amount, RP Preferred Schedule and RP Default Schedule:** Normal Pension reduced actuarially for each month by which the participant is younger than 65

Disability

- **Age Requirement:** None
- **Service Requirement:** 5 years of credited service or 5 years of vesting service
- **Amount, Pre-RP:** Normal Pension accrued payable immediately
- **Amount RP Preferred Schedule and RP Default Schedule:** Normal Pension reduced actuarially for each month by which the participant is younger than 65

Vesting

- **Age Requirement:** None
- **Service Requirement:** 5 years of vesting service or 5 years of future service credit.

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- **Amount:** Same as Normal Pension based upon future service credits only. If retiring prior to 65, the benefit is reduced in accordance with an Early Retirement benefit.
- **Normal Retirement Age:** Later of 65 and 5th anniversary of participation
- **Delayed Retirement Amount:** Normal Pension accrued at Normal Retirement Age (NRA), increased by 1.0% for each month greater than NRA, and 1.5% for each month greater than age 70.

Spouse's pre-retirement death benefit

- **Age Requirement:** None
- **Service Requirement:** Eligible for an immediate or deferred pension.
- **Amount, Pre-RP:** 100% of the benefit employee would have received had they retired the day before they died and elected the joint and survivor option. The spouse's benefit is payable immediately upon the death of an active participant and is deferred, if applicable, to when the participant would have achieved 55 upon the death of an inactive vested participant.
- **Amount, RP Preferred Schedule and RP Default Schedule:** Same as Pre-RP but reduced actuarially for each month by which the participant is younger than 65.

Pre-retirement contingent annuitant

- **Age Requirement:** None
- **Service Requirement:** 5 years of future service credit if active or 10 years if inactive.
- **Coverage:** Benefit payable to non-spousal beneficiaries. Spouse may elect this benefit if present value is greater than the Spouse Pre-retirement Death benefit.
- **Amount, Pre-RP and RP Preferred Schedule:** 60 months of Normal Pension payable immediately.
- **Amount, RP Default Schedule:** No benefit payable.

Husband and wife post-retirement death benefit

- **Amount, Pre-RP:** If married, pension benefits are paid in the form of a joint and survivor annuity unless this form is rejected by the participant and spouse. If not rejected, the benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. In the event the spouse pre-deceases the employee, the benefit will increase to the amount payable had the participant rejected

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the joint-and-survivor form of benefit. If rejected, or if not married, benefits are payable for five years certain and thereafter during the life of the employee without reduction, or in any other available optional form elected by the employee in an actuarially equivalent amount.

- **Amount, RP Preferred Schedule:** Same as Pre-RP, except the five years certain provision is not applicable.
- **Amount, RP Default Schedule:** Same as Pre-RP, except in the event the spouse pre-deceases the employee, the benefit remains unchanged and will not increase to the amount payable had the participant rejected the joint and survivor form of benefit. In addition, the five years certain provision is not applicable.

Optional forms of benefits

In general, the currently available optional payment forms of payment are:

Pre-RP, Preferred Schedule

- 50% Spouse Pension with pop-up, converted from the normal form based on simplified factors
- 75% Spouse Pension with pop-up, converted from the normal form based on simplified factors
- 100% Spouse Pension with pop-up, converted from the normal form based on simplified factors
- 120 Certain Payments option, converted from the normal form based on simplified factors

Default Schedule

- 50% Spouse Pension without pop-up, converted from the normal form based on simplified factors
- 75% Spouse Pension without pop-up, converted from the normal form based on simplified factors
- 100% Spouse Pension without pop-up, converted from the normal form based on simplified factors
- 120 Certain Payments option, converted from the normal form based on simplified factors

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Early retirement reduction factors for default and preferred schedules

Commencement Age	Reduction Factor
55	0.366
56	0.401
57	0.441
58	0.485
59	0.534
60	0.590
61	0.653
62	0.723
63	0.804
64	0.895
65	1.000

Changes in plan provisions

This valuation reflects the continued implementation of the Rehabilitation Plan provisions, which takes effect upon the later of: (i) September 1, 2019, under the Default Schedule or January 1, 2022 under the Preferred Schedule and (ii) incorporation of the Rehabilitation Plan Schedule into a participant's employer's collective bargaining agreement or participation agreement.

Solely for IRS Form 5500 Schedule MB reporting purposes, changes in liability to account for benefit-bearing contribution rate increases reflected in collective bargaining agreements were categorized as plan amendments in this report even though there was no amendment to the Plan.