Sheet Metal Workers' National Pension Fund

Withdrawal Liability Valuation as of December 31, 2023

Segal

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October 22, 2024

Board of Trustees
Sheet Metal Workers' National Pension Fund
Falls Church, Virginia

Dear Trustees:

This report summarizes and reviews the Plan's status and experience with respect to employer withdrawal liability. It outlines the withdrawal liability method adopted and explains the calculation of the amount of unfunded vested liability allocable to a withdrawn employer. It also establishes the basis for assessments of withdrawal liability for a withdrawal during the period January 1, 2024 through December 31, 2024, including the actuarial assumptions used.

This report has been prepared for the exclusive use and benefit of the Board, based upon information provided by the Fund Office and the Fund's other service providers. Segal makes no representation or warranty as to the future status of the Plan and does not guarantee any particular result. This document does not constitute legal, tax, accounting or investment advice or create or imply a fiduciary relationship. The Trustees are encouraged to discuss any issues raised in this report with the Fund's legal, tax and other advisors before taking, or refraining from taking, any action.

The actuarial calculations were completed under the supervision of William J. Gitterman, FSA, MAAA, Enrolled Actuary. The basic participant and financial data used in this report are the same as those used in the actuarial valuation as of January 1, 2024. The benefit provisions included in the calculations are those that were in effect on December 31, 2023. The method described in the PBGC Technical Update 10-3 has been used to account for reductions in benefits that occurred as a result of implementation of the Rehabilitation Plan when the Plan was in critical (Red Zone) status.

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

Sincerely,

Segal

Ryan S. Carney, FSA, MAAA, EA
Senior Vice President & Benefits Consultant

William J. Gitterman, FSA, MAAA, EA
Consulting Actuary

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Section 1: Actuarial Valuation Summary

Important information about withdrawal liability valuations

A withdrawal liability valuation is prepared to assist in the determination and assessment of withdrawal liability. It is a forecast of future uncertain obligations of a pension plan. As such, the forecast will never precisely match the actual stream of benefits and expenses to be paid.

In order to prepare withdrawal liability valuations, Segal relies on a number of input items. These include:

Item	Description
Plan Provisions	Plan provisions define the rules that will be used to determine benefit payments, and those rules, or the interpretation of them, may change over time. It is important for the Trustees to keep Segal informed with respect to plan provisions and administrative procedures, and to review the plan summary included in our report to confirm that Segal has correctly interpreted the plan of benefits. For an employer withdrawing in a particular plan year, the relevant plan provisions are those in effect at the end of the prior plan year.
Participant Information	The present value of vested benefits, upon which withdrawal liability for an employer is determined, is based on data provided to the actuary by the plan. Segal does not audit such data for completeness or accuracy, other than reviewing it for obvious inconsistencies compared to prior data and other information that appears unreasonable. It is not necessary to have perfect data for a valuation: the valuation is an estimated forecast, not a prediction. Notwithstanding the above, it is important for Segal to receive the best possible data and to be informed about any known incomplete or inaccurate data.
Financial Information	The withdrawal liability valuation is based on the asset values as of the valuation date, typically reported by the auditor. The allocation of the unfunded present value of vested benefits to an employer is based on its detailed obligated contribution information as well as that for other participating employers, as provided by the plan.
Actuarial Assumptions	In measuring the present value of vested benefits for withdrawal liability purposes, Segal starts by developing a forecast of the vested benefits to be paid to existing plan participants for the rest of their lives and the lives of their beneficiaries. This requires actuarial assumptions as to the probability of death and retirement. The forecasted benefits are then discounted to a present value. The actuarial model used to develop the present value of vested benefits for withdrawal liability purposes may use approximations and estimates that will have an immaterial impact on our results. In addition, the actuarial assumptions may change over time, and while this can have a significant impact on the reported results, it does not mean that the previous assumptions or results were unreasonable or wrong.

Section 1: Actuarial Valuation Summary

Given the above, the user of Segal's withdrawal liability valuation report (or other actuarial calculations) needs to keep the following in mind:

- The withdrawal liability valuation report is prepared for use by the Trustees in administering the Plan. It includes information relative to the provisions of ERISA pertaining to withdrawal liability. Segal is not responsible for the use or misuse of its report, particularly by any other party.
- A withdrawal liability valuation is a measurement as of a specific date — it is not a prediction of a plan's future financial condition. Accordingly, Segal did not perform an analysis of other potential financial measurements.
- The measurements in this report are not necessarily appropriate for assessing the sufficiency of Plan assets to cover the estimated cost of settling the Plan's benefit obligations or the need for or the amount of future contributions.
- Segal does not provide investment, legal, accounting, or tax advice and is not acting as a fiduciary to the Plan. This withdrawal liability valuation report is based on Segal's understanding of applicable guidance in these areas and of the Plan's provisions, but they may be subject to alternative interpretations. The Trustees should look to their other advisors for expertise in these areas.
- While Segal maintains extensive quality assurance procedures, a withdrawal liability valuation involves complex computer models and numerous inputs. In the event that an inaccuracy is discovered after presentation of Segal's results, Segal may revise that valuation report or make an appropriate adjustment in the next valuation.
- Segal's withdrawal liability report shall be deemed to be final and accepted by the Trustees upon delivery and review. Trustees should notify Segal immediately of any questions or concerns about the final content.

Actuarial valuation results

- The unfunded vested liability as of December 31, 2023 is $2,951,874,664 excluding Affected Benefits pools. A negative basic pool of $770,802,941 was established for 2023.
- The decrease in the unfunded vested liability since last year was primarily caused by the increase in the PBGC interest rates and a better than assumed market value return.
- The unamortized balance of the Affected Benefits pools, representing the value of benefit reductions under the Rehabilitation Plan when the Plan was in critical (Red Zone) status, is $18.1 million.
- $115,258 was non-assessable as a result of de minimis amounts and $3,243,233 for other factors including settlements. As a result, a reallocated pool of $3,358,491 was established as of December 31, 2023.

Developments since last valuation

The following are developments since the last valuation, from December 31, 2022 to December 31, 2023:

- **Plan assets:** The net investment return on the market value of assets was 13.77% for the plan year ending December 31, 2023.
- **Assumption changes:** Since the last valuation, the PBGC interest rates used to determine the funded portion of the present value of vested benefits changed, from 3.90% for 20 years and 3.65% thereafter, to 5.06% for 20 years and 4.37% thereafter. In addition, the mortality assumptions were updated. New assumptions (other than the PBGC interest rates) were selected based on a review of recent plan experience, trends and expectations, representing the actuary's best estimate of anticipated experience under the Plan. In total, the new mortality assumptions increased the present value of vested benefits by 0.19%.
- **Plan provisions:** Under the Plan's benefit accrual formula, based on applicable 3-year average market value investment returns, the Applicable Percentage changed from 0.75% for the 2022 Plan Year to 1.25% for the 2023 Plan Year.

  The following changes were adopted and effective after December 31, 2023 and not included in this valuation. They will be recognized in a subsequent valuation:

  – The Variable Benefit Accrual Rate (VBAR) formula was revised for prospective benefit accruals effective January 1, 2024

  A summary of key plan provisions can be found in Section 3.
- **Employer withdrawals:** For the last plan year, the Fund received $7,066,873 from withdrawal liability assessments. These serve to fund the Plan in the same manner as employer contributions. Currently, 28 withdrawn employers are making withdrawal liability payments.

Summary of key valuation results

Valuation Result	2022	2023
Demographic Data:		
• Number of active vested participants	44,312	45,381
• Number of inactive vested participants[1]	35,095	34,830
• Number of retired participants and beneficiaries[2]	50,091	50,608
Interest Assumptions:		
• Funding rate	7.25%	7.25%
• PBGC rates	3.90% for 20 years, 3.65% thereafter	5.06% for 20 years, 4.37% thereafter
Present Value of Vested Benefits[3]:		
• Present value of vested benefits on funding basis	$8,435,072,230	$8,664,079,860
• Present value of vested benefits on PBGC basis, including allowance for expenses	12,880,329,114	11,440,334,020
• Present value of vested benefits measured for withdrawal liability purposes (excluding Affected Benefits pools)	10,712,457,170	10,494,456,968
Unfunded Vested Liability:		
• Market value of assets[4]	$6,598,823,941	$7,542,582,304
• Unfunded vested liability for withdrawal liability purposes (excluding Affected Benefits pools)	4,113,633,229	2,951,874,664
• Unamortized balance of Affected Benefits pools	100,991,896	18,110,281
• Unamortized balance of reallocated pools	58,682,988	56,968,876
• Total amount allocable to withdrawing employers	4,273,308,113	3,026,953,821
New Withdrawal Liability Pools Established:		
• Basic pool	$245,530,080	-$770,802,941
• Reallocated pool	5,934,636	3,358,491

[1] Excludes alternate payees with deferred benefits (496 in 2022 and 604 for 2023)
[2] Excludes alternate payees in pay status (1,573 in 2022 and 1,617 for 2023)
[3] Includes liabilities for alternate payees
[4] Includes net withdrawal liability receivable

Section 2: Determination of Withdrawal Liability

Summary of MPPAA rules

The Multiemployer Pension Plan Amendments Act of 1980 (MPPAA) requires assessment of withdrawal liability to an employer that withdraws from the Plan. In general, “withdrawal” means the employer has permanently ceased operations under the Plan or has permanently ceased to have an obligation to contribute to the Plan. An employer is entitled to be advised, upon its request, of the amount of its potential withdrawal liability.

Determination of unfunded vested liability

The amount of withdrawal liability is based on the Plan’s unfunded vested liability at the time of withdrawal. The “unfunded vested liability” refers to the value of vested benefits not covered by assets.

For withdrawal liability purposes, “vested benefits” are the benefits that are considered non-forfeitable if the participant incurs a permanent break in service. The value of these benefits is based on the Plan provisions as of the withdrawal liability valuation date.

Determinations of the value of the liability for vested benefits are based on a set of actuarial assumptions. The law prescribes that the assumptions and methods used must be reasonable in the aggregate and “offer the actuary’s best estimate of anticipated experience under the plan.” It also authorizes the PBGC to promulgate assumptions and methods for use by the Plan’s actuary. However, the PBGC has not promulgated any assumptions or methods.

The actuarial assumptions and methods are reasonable (taking into account the experience of the Plan and reasonable expectations) and, in combination, represent the actuary’s best estimate of anticipated experience under the Plan to determine the unfunded vested benefits for withdrawal liability purposes.

Method for allocating withdrawal liability

The Plan determines the liability of an employer that has completely withdrawn on the basis of the statutory presumptive method defined in Section 4211(b) of ERISA. Briefly, the method involves prorating the unfunded vested liability as of December 31, 1979 plus (or minus) a proration of changes in that figure in each subsequent year before withdrawal. The original unfunded vested liability and each year’s change are subject to 5% annual write-downs.

Section 2: Determination of Withdrawal Liability

The Trustees have adopted one modification to this method. In any year following a merger, the pools are restarted. Therefore, after the merger of Local 38 effective January 1, 1999, all liability pools established in 1998 or earlier were eliminated. The presumptive method was then reinitiated with a single liability pool set up for 1999 (i.e., the initial pool).

The liability of an employer for complete withdrawal from the Plan is determined as the sum of the unamortized balances, as of the end of the plan year preceding withdrawal, of the employer's prorated shares of each of the following:

- The Plan's unfunded vested liability as of December 31, 1999
- The change in the Plan's unfunded vested liability as of the end of each subsequent plan year (to the end of the plan year preceding withdrawal)
- Reallocated amounts that would have been payable to the Plan as withdrawal liability payments for withdrawals in preceding years, except that they were non-assessable under certain statutory provisions or not collectible.
- Amounts representing the present value of vested benefits eliminated due to implementation of the Rehabilitation Plan (Affected Benefits) amortized over 15 years at the interest rate used for plan funding.

The PBGC has affirmed that a multiemployer plan may assess withdrawal liability to employers that withdraw even if the plan currently has no unfunded vested liability.

Initial amount

The Plan's unfunded vested liability as of December 31, 1999 was determined by subtracting the value of Plan assets from the value of vested benefits under the Plan.

Annual changes

The change in the Plan's unfunded vested liability as of the end of any plan year is generally determined as follows:

- By establishing the Plan's unfunded vested liability as of the end of that plan year
- By subtracting the total, not less than zero, of (a) the unamortized balance of the unfunded vested liability as of December 31, 1999 and (b) the unamortized balances of each previous annual change after December 31, 1999

A "positive" change represents an unfunded vested liability greater than the total of the unamortized balances and is an addition to potential liability assessments for future withdrawals. A "negative" change represents an unfunded vested liability lower than the total of unamortized balances and is a credit against amounts that would otherwise determine potential liability assessments for future withdrawals.

Reallocated amounts

The total amount, if any, of unfunded vested liability determined in any plan year after December 31, 1999 to be non-assessable or uncollectible with respect to employers that withdrew is established as an amount to be prorated among each of the participating employers as an additional withdrawal liability amount. Non-assessable amounts consist of amounts deducted under the *de minimis* rule (ERISA Section 4209), amounts not payable because of the 20-year limit (ERISA Section 4219(c)(1)), and amounts not payable because of the limitations in the event of sale of all of the employer's assets (ERISA Section 4225). Uncollectible amounts consist of amounts that the Trustees have determined are uncollectible for reasons arising out of cases under federal bankruptcy law or similar proceedings. They also include any other amount of assessed liability determined by the Plan's Trustees to be uncollectible.

Each annual reallocable amount is written down by 5% of the original amount for each full year from the date as of which it was originally determined to the end of the plan year preceding withdrawal.

Affected benefits

A pool is added to the total amount representing the value of vested benefits that were eliminated during the year due to implementation of the Rehabilitation Plan when the Plan was in critical ("Red Zone") status. This pool, called the Affected Benefits pool, is amortized over 15 years at the interest rate used for plan funding for the plan year for which the pool is established.

Unamortized balances

The "unamortized balance" of each of these sources of liability assessment (other than Affected Benefits pools) is determined by reducing each figure by 5% of its original amount for each full year from the end of the plan year as of which the charge was originally determined to the end of the plan year immediately preceding withdrawal.

Proration to the employer

For determining the amount of its liability in the event of its complete withdrawal, the initial amount of unfunded vested liability, each annual change in the unfunded vested liability and each annual reallocable amount is prorated to an employer on the basis of a ratio of contributions. The ratio is the employer's obligated contributions to the Plan to total employer contributions made to the Plan during an "apportionment base period," consisting of the 5 years ending with the end of the plan year as of which each of the amounts was determined.

The total of employer contributions with respect to an apportionment base period is reduced by contributions otherwise included in the total that were made by significant employers that withdrew from the Plan in or before the plan year in which the change or reallocation arose. The total is also reduced by any employer surcharges paid to a plan that resulted from the plan being in critical status under PPA ’06. MPRA provides that contribution increases that go into effect during plan years beginning after December 31, 2014 that are deemed to be required to be made to enable the plan to meet Funding Improvement or Rehabilitation Plan requirements are also disregarded, unless the additional contributions are used to provide an increase in benefits, including an increase in future benefit accruals. The Plan has been in the "Green Zone" since the plan year beginning January 1, 2022.

De minimis

Each withdrawal liability assessment is the total of the unamortized balances of the allocation amounts, as defined above, less a de minimis deductible. The deductible is $50,000 but not more than ¾% of the Plan’s unfunded vested liability. This deductible amount is reduced, dollar for dollar, by the amount by which the total of charges prorated to the employer exceeds $100,000.

Payment of withdrawal liability

A withdrawn employer’s withdrawal liability assessment is payable in quarterly installments. The quarterly installment is calculated as one-fourth of the product of:

- The average base units in the three consecutive years that produce the highest average within the 10-year period ending before the plan year of withdrawal.
- The highest contribution rate in the 10-year period ending with the plan year of withdrawal.

Per MPRA, any contribution surcharges for which the obligation accrues on or after December 31, 2014 or any increases in the contribution rate required under a Funding Improvement or a Rehabilitation Plan that go into effect during plan years beginning after December 31, 2014 are excluded from the determination of the highest rate in the 10-year period described above, unless the additional contributions are used to provide an increase in benefits, including an increase in future benefit accruals. This Plan has been in the "Green Zone" since the plan year beginning January 1, 2022.

The number of quarterly installments is calculated on the basis of the amount of withdrawal liability and interest at the actuarial valuation rate used for funding purposes. Payments are limited to a maximum of 20 years.

Under certain circumstances, as allowed by ERISA, the Trustees may require immediate payment of withdrawal liability assessments.

Section 2: Determination of Withdrawal Liability

Maintenance of allocations

Even if no employer withdrawal had occurred in a given year, an annual determination of the Plan's unfunded vested liability, and of any reallocable uncollectible withdrawal liability amounts, is required. The Plan must be in a position to allocate liability to any particular employer based on its contribution history. These procedures and records are necessary in order to be able to determine an assessment should withdrawal occur and also to respond to an inquiry from a participating employer as to the amount of its potential liability.

Partial withdrawal

The withdrawal may also be partial. A "partial withdrawal" occurs if there is a 70% decline in the number of contribution base units or there is a partial cessation of the employer's obligation to contribute. A 70% decline occurs if the contribution base units in the plan year and the preceding two plan years (the testing period) are less than 30% of contribution base units for the high base year. The "high base year" is the average of the base units in the two plan years in which the base units were the highest within the five plan years preceding the testing period. A partial withdrawal may also occur if an employer ceases to have an obligation to contribute under one or more, but not all of its collective bargaining agreements, and continues work in the jurisdiction, or if the employer permanently ceases to be obligated to contribute for work performed at one or more, but not all, of the facilities covered but continues the work at that facility.

Under a partial withdrawal, the amount of liability is equal to the amount of withdrawal liability for a complete withdrawal (net of any deductible), multiplied by a fraction, which is one minus a ratio. The ratio is that of the employer's contribution base units in the plan year following the year of the partial withdrawal to the employer's average contribution base units in the five plan years preceding the year of the partial withdrawal.

Plan reentry

PBGC has issued regulations describing the procedure to be followed in the event an employer reenters the Plan after incurring withdrawal liability. Withdrawal liability will be abated if the post-re-entry level of contribution base units exceeds 30% of the average of the contribution base units in the two plan years in which the base units were the highest, within the five plan years preceding the plan year of withdrawal, provided the employer posts a bond or escrow account equal to 70% of the withdrawal liability payments otherwise due. In the event of a withdrawal following reentry, the withdrawal liability is adjusted to reflect prior withdrawal liability payments.

Optional rules adopted by this plan

For purposes of prorating the Plan’s unfunded vested liability to a withdrawing employer, only contributions from significant withdrawn employers are excluded from the denominator of the allocation fraction.

An employer that would otherwise incur a complete withdrawal or a partial withdrawal will not be deemed to have withdrawn, despite the cessation of its obligation to contribute to the Plan within 48 months after the first obligation to contribute to the Plan on or after January 1, 2015 (“Free Look” provision) and certain other conditions are met.

Special rules for construction industry plans

An employer in the construction industry is considered to have withdrawn from the Plan only if it continues (or within five years resumes) the same type of work in the jurisdiction of the labor contract.

For a construction-industry plan, a partial withdrawal occurs only if the employer is obligated to contribute to the plan for only an insubstantial portion of its continuing work of the type covered by the plan within the jurisdiction of the labor agreement.

Withdrawal liability experience

For the last plan year, the Fund received $7,066,873 from withdrawal liability assessments. These serve to fund the Plan in the same manner as employer contributions. Currently, 28 withdrawn employers are making withdrawal liability payments.

An employer is entitled to be advised, upon its request, of the amount of its potential withdrawal liability.

Section 3: Actuarial Certificate

October 22, 2024

Certificate of Withdrawal Liability Actuarial Valuation

This is to certify that Segal has prepared an actuarial valuation of the Sheet Metal Workers' National Pension Fund as of December 31, 2023 to calculate the pools used to assess withdrawal liability to employers who withdraw during the plan year beginning January 1, 2024. The calculations were performed in accordance with generally accepted actuarial principles and practices. 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 valuation was based on information supplied by the auditor with respect to contributions and assets and by the Plan Administrator with respect to the data required on participants. We have not verified and customarily would not verify such information, but we have no reason to doubt its substantial accuracy.

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 noted in Exhibit A, and in my opinion the assumptions used, in the aggregate, (a) are reasonable (taking into account the experience of the Plan and reasonable expectations) and (b) represent my best estimate of anticipated experience under the Plan.

William J. Gitterman, FSA, MAAA
Consulting Actuary
Enrolled Actuary No. 23-08743

Exhibit A: Calculation of unfunded vested liability

The valuation was made with respect to the following data supplied to us by the Plan Administrator:

Item	Amount
Participants active with vested rights (including 47 participants with unknown age)	45,381
Participants inactive with vested rights (including 140 beneficiaries with rights to deferred payments and 69 participants with unknown age)	34,830
Pensioners as of the valuation date (including 9,835 beneficiaries in pay status and 70 pensioners in suspended status)	50,608
Total participants	**130,819**

The actuarial factors as of the valuation date are as follows:

Item	Amount
Present value of vested benefits at funding interest rate	$8,664,079,860
Present value of vested benefits at PBGC interest rates, including allowance for expenses	11,440,334,020
Market value of assets	7,542,582,304
Funded ratio at PBGC interest rates	65.93%
Present value of vested benefits for withdrawal liability purposes (excluding Affected Benefits pools)	$10,494,456,968
Unfunded vested liability (excluding Affected Benefits pools)	2,951,874,664
Unamortized balance of Affected Benefits pools	18,110,281
Unamortized balance of reallocated pools	56,968,876
Total amount allocable to withdrawing employers	**$3,026,953,821**

Exhibit B: Withdrawal liability pools

Original Pool Amount and Unamortized Balances on December 31, 2023[1]

Plan Year Ended December 31	Unfunded Vested Liability	Original Basic Pool	Original Reallocated Pool	Original Affected Benefits Pool	Unamortized Basic Pool	Unamortized Reallocated Pool	Unamortized Affected Benefits Pool
2004	$2,556,022,442	$389,922,930	$4,470,812	$0	$19,496,147	$223,541	$0
2005	2,626,361,805	219,504,752	584,963	0	21,950,475	58,496	0
2006	3,125,995,466	659,774,289	1,768,092	0	98,966,143	265,214	0
2007	3,283,243,150	350,377,024	2,740,446	0	70,075,405	548,089	0
2008	2,905,946,043	-166,648,911	842,692	715,689,683	-41,662,228	210,673	0
2009	3,213,007,196	509,376,896	5,087,176	97,042	152,813,069	1,526,153	10,227
2010	3,541,489,308	556,266,708	9,185,020	71,615,261	194,693,348	3,214,757	14,567,591
2011	3,875,896,499	590,005,117	6,839,258	9,317,175	236,002,047	2,735,703	2,744,899
2012	4,275,068,600	684,270,284	8,571,492	165,983	307,921,628	3,857,171	62,980
2013	4,115,908,264	160,151,360	6,629,378	1,580,864	80,075,680	3,314,689	724,584
2014	4,407,461,882	618,872,884	13,269,251	0	340,380,086	7,298,088	0
2015	4,856,394,008	807,195,035	8,756,994	0	484,317,021	5,254,196	0
2016	5,094,416,662	636,645,316	734,153	0	413,819,455	477,199	0
2017	4,896,667,337	232,705,600	10,648,767	0	162,893,920	7,454,137	0
2018	4,805,880,634	351,303,507	705,984	0	263,477,630	529,488	0
2019	4,661,458,225	315,232,971	1,377,958	0	252,186,377	1,102,366	0
2020	4,940,047,630	717,193,372	10,935,730	0	609,614,366	9,295,371	0
2021	4,281,566,185	-197,329,489	674,611	0	-177,596,540	607,150	0
2022	4,113,633,229	245,530,080	5,934,636	0	233,253,576	5,637,904	0
2023	2,951,874,664	-770,802,941	3,358,491	0	-770,802,941	3,358,491	0

[1] Basic and reallocated pools are written down annually at the rate of 5% of the original amount. The Affected Benefits pools are amortized over 15 years at the interest rate used for plan funding for the year for which the pool was established.

Exhibit C: Statement of actuarial assumptions, methods and models

Rationale for demographic and noneconomic assumptions

The information and analyses used in selecting each demographic assumption that has a significant effect on this actuarial valuation are shown in the experience study report titled: “Demographic Experience Analysis: January 1, 2013 through December 31, 2017,” dated April 2, 2019. Current data is reviewed in conjunction with each annual valuation. Mortality assumptions were updated based on review of recent experience and professional judgement.

Investment return

To the extent the vested benefits are matched by the market value of plan assets on hand: interest assumptions prescribed by the Pension Benefit Guaranty Corporation under 29 C.F.R. Ch. XL, Part 4044, which are in effect for the applicable withdrawal liability valuation date, are used.

- PBGC Interest Rates as of December 31, 2023:
  - First 20 years 5.06%
  - After 20 years 4.37%

To the extent the vested benefits are not matched by plan assets (at market), the interest assumption is the same as used for plan funding: 7.25% in the actuarial valuation for the year beginning on the day following the withdrawal liability valuation date.

The portion of the vested benefits that is matched by readily available assets is determined by comparing the total present value of vested benefits plus expenses – at PBGC rates – with the total market value of assets; each vested benefit is treated as covered by assets to the same extent as all other vested benefits.

- The present value of vested benefits is based on a blend of two liability calculations:
  - The first calculation applies to benefits that could be settled immediately because assets on hand are sufficient to cover their market value. Since withdrawal liability is a final settlement of an employer’s obligation to the Plan, the discount rates used are based on estimated annuity purchase rates. ERISA Sec. 4044 interest rates promulgated by the PBGC for multiemployer plans terminating by mass withdrawal on the measurement date are used as a proxy for annuity purchase rates.
  - The second calculation applies to benefits that cannot be settled immediately because they are not currently funded. This calculation uses the interest rate determined by the plan actuary for minimum funding, based on the expected return on current and future assets.

Affected Benefits liabilities are valued at the same interest rate assumption used for plan funding for the plan year for which the pool is established.

Mortality rates

Non-retired participants: Pri-2012 Blue Collar Employee Mortality Tables (sex-distinct), projected generationally using Scale MP-2021

Healthy pensioners: Pri-2012 Blue Collar Healthy Retiree Mortality Tables (sex-distinct), projected generationally using Scale MP-2021

Survivor annuitants: Pri-2012 Blue Collar Healthy Contingent Survivor Mortality Tables (sex-distinct), projected generationally using Scale MP-2021

Disabled pensioners: Pri-2012 Disabled Retiree Mortality Tables (sex-distinct), projected generationally using Scale MP-2021

The mortality rates are based on historical and current demographic data, adjusted to reflect estimated future experience and professional judgment. As part of the analysis, a comparison was made between the actual number of deaths and the projected number based on the prior year's assumption over the most recent five years, taking into consideration the results of Segal's industry mortality study.

Annuitant mortality rates[1]

Age	Healthy Male	Healthy Female	Survivor Male	Survivor Male	Disabled Male	Disabled Female
55	0.61%	0.47%	1.60%	0.79%	2.06%	1.41%
60	0.94%	0.73%	2.07%	1.12%	2.37%	1.76%
65	1.29%	1.04%	2.62%	1.48%	2.90%	2.07%
70	1.94%	1.46%	3.23%	1.95%	3.71%	2.53%
75	3.01%	2.32%	4.25%	2.84%	5.24%	3.57%
80	5.18%	3.98%	6.14%	4.41%	8.08%	5.63%
85	9.07%	7.08%	9.45%	7.26%	12.71%	9.33%
90	15.63%	12.55%	15.43%	12.55%	19.40%	15.50%

[1] Mortality rates are projected on a generational basis using Scale MP-2021. Rates above are sample rates in 2024.

Employee mortality rates[1]

Age	Mortality Male	Mortality Female
20	0.07%	0.02%
25	0.08%	0.03%
30	0.09%	0.04%
35	0.11%	0.05%
40	0.12%	0.07%
45	0.13%	0.09%
50	0.17%	0.12%
55	0.27%	0.19%
60	0.45%	0.31%

Retirement rates for active participants

Age	Annual Retirement Rates Not Eligible for Special Early	Annual Retirement Rates Eligible for Special Early but not for 55/30 (60/30) Pension	Annual Retirement Rates Eligible for 55/30 (60/30) Pension[2]
55	5%	5%	30%
56-57	5	5	15
58	5	5	15
59	5	8	15
60	6	10	25
61	9	14	25
62	22	33	40
63	13	21	25
64	16	24	25
65-66	25	35	40
67-69	25	35	30
70	100	100	100

[1] Mortality rates are projected on a generational basis using Scale MP-2021. Rates above are sample rates in 2024.
[2] Rate at first eligibility for 55/30 (60/30, if applicable) Pension is 30% or above rate at applicable age, if higher

Retirement rates for inactive vested participants

Age	Annual Retirement Rates Not Eligible for Special Early	Annual Retirement Rates Eligible for Special Early but not for 55/30 (60/30) Pension	Annual Retirement Rates Eligible for 55/30 (60/30) Pension
55	5%	15%	65%
56	5	10	40
57	5	10	45
58	5	15	40
59	5	15	25
60	5	15	30
61	5	20	30
62	10	50	50
63	10	30	50
64	15	30	50
65	35	35	50
66-79	25	50	50
80	100	100	100

Unknown data for participants

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

Percent married

80%

Age and Sex of spouse

Spouse of male participant is assumed to be three years younger than the participant and spouse of female participant is assumed to be three years older than the participant. If the spouse's sex is not provided, the spouse is assumed to be the opposite sex of the participant.

Benefit election

50% of participants are assumed to elect a single life annuity, 20% of participants are assumed to elect a 50% joint and survivor annuity (with popup, if available), and 30% of participants are assumed to elect a 100% joint and survivor annuity (with popup, if available).

Administrative expenses

$10,000, plus $200 per vested participant, plus a percentage (defined by statute) of the excess of the value of plan benefits over $200,000 and is applicable to the portion of benefits that is matched by assets.

Value of assets

At market value

Allocation method

Presumptive, with fresh start in the year following a merger (most recently in 1999)

Contribution period for prorating liabilities

5 years. Contributions from significant withdrawn employers as of the date each pool is established are excluded. Contribution rate increases under the Funding Improvement Plan after December 31, 2014 are recognized if they result in increases in benefits.

De minimis deductible

$50,000, or 3/4 of 1% of the unfunded vested liability, if smaller. The deductible is reduced, dollar for dollar, if the gross assessment is in excess of $100,000.

Free look

An employer that would otherwise incur a complete withdrawal or a partial withdrawal will not be deemed to have withdrawn, despite the cessation of its obligation to contribute to the Plan, if all of the following conditions are met:

- The employer first had an obligation to contribute to the Plan on or after January 1, 2015.

- The employer had an obligation to contribute to the Plan for no more than 48 consecutive calendar months, starting with the first month for which the employer is obligated to contribute to the Plan.
- The employer was obligated to make Plan contributions for each year through the date of withdrawal in an amount that was less than 2% of the sum of all employer contributions made to the Plan for each of such years.
- The employer has never before avoided full or partial withdrawal liability from the Plan under the Free Look provision.
- Any past service credit otherwise grantable to participants (other than current pensioners) for employment with the employer is cancelled.

The ratio of the Fund’s assets to benefit payments made during the year preceding the first plan year for which the employer was required to contribute to the Plan was at least 8-to-1.

Affected benefits pools

The Affected Benefits pools (as described by PBGC Technical Update 10-3) represent the present value of vested benefits that were eliminated each year due to implementation of the Rehabilitation Plan. Each pool is determined using the same interest rate assumption used for plan funding for the plan year for which it is established and is amortized over 15 years at that interest rate.

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 presented to meet regulatory, legislative and client requirements. 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 actuary.

Changes in assumptions

Based on past experience and future expectations, the following actuarial assumptions were changed as of January 1, 2024 for funding purposes and December 31, 2023 for withdrawal liability purposes:

- Mortality for Healthy Male Employees, previously 103% of the RP-2006 Blue Collar Male Employee Mortality Table, projected generationally from 2006 with scale MP-2018
- Mortality for Healthy Female Employees, previously 108% of the RP-2006 Blue Collar Female Employee Mortality Table, projected generationally from 2006 with scale MP-2018

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- Mortality for Healthy Male Pensioners or Beneficiaries, previously 103% of the RP-2006 Blue Collar Healthy Annuitant Mortality Table, projected generationally from 2006 with scale MP-2018
- Mortality for Healthy Female Pensioners or Beneficiaries, previously 108% of the RP-2006 Blue Collar Healthy Annuitant Mortality Table, projected generationally from 2006 with scale MP-2018
- Mortality for Disabled Males, previously 90% of the RP-2006 Disabled Male Retiree Mortality Table, projected generationally from 2006 with scale MP-2018
- Mortality for Disabled Females, previously 100% of the RP-2006 Disabled Female Retiree Mortality Table, projected generationally from 2006 with scale MP-2018

Exhibit D: Summary of plan provisions

This exhibit summarizes the major provisions of the Plan included in the valuation. It is not intended to be, nor should it be interpreted as, a complete statement of all plan provisions.

Plan year

January 1 through December 31

Pension credit year

January 1 through December 31

Plan status

Ongoing plan

Normal retirement

- **Age Requirement:** None
- **Service Requirement:** Five years of participation in the Plan
- **Amount:** Described below:
  - **For service on and after January 1, 2014:**
    - ❖ Participant's Benefit Rate multiplied by the participant's Contribution Hours for the Plan Year multiplied by the Applicable Percentage for the Plan Year.
    - ❖ Benefit Rate is the portion of the participant's contribution rate that is subject to benefit accruals. For Participants working under a Collective Bargaining Agreement that qualifies for a 55/30 (or 60/30) Pension, the Benefit Rate is the total Contribution Rate less the 55/30 (or 60/30) Rate (30% of the Contribution Rate for periods after December 1, 2007).
    - ❖ Contribution Hours are the hours for which contributions are required to be made for the participant's work in Covered Employment.
    - ❖ Applicable Percentage is based on the average of the Plan's rate of market value investment return for each of the three most recent Plan Years reported in the Actuarial Valuation and Review as of January 1 of the immediately preceding Plan Year and is defined in the following table:

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Applicable Percentage	Average of Market Value Investment Return Percentages for 3 Most Recent Plan Years
1.25%	10.0% or higher
1.00%	8.5% or higher but less than 10.0%
0.75%	6.5% or higher but less than 8.5%
0.50%	Greater than 0% but less than 6.5%
0.00%	0% or less

- ❖ The above formula applies unless otherwise stated in a Funding Improvement Plan Option.
- ❖ The Applicable Percentage for the 2023 Plan Year is 1.25%.

– **For service and on and after adoption of Rehabilitation Plan Schedule and before January 1, 2014:**

- ❖ Default Schedule/Persons for Whom Contribution were Not Required to be Made (“Persons for Whom”): 1% of the amount determined by multiplying the participant’s Benefit Rate by the participant’s Contribution Hours for the Plan Year.
- ❖ First Alternative Schedule: Same as accrual for service on and after December 1, 2007 and before adoption of Rehabilitation Plan Schedule.
- ❖ Second Alternative Schedule: 1% of the amount determined by multiplying the participant’s Benefit Rate by the participant’s Contribution Hours for the Plan Year.
- ❖ Formerly Alternative Schedule and Agreement Did Not Include Required Contribution Rate Increases - No Increase Consequences (“NIC”): 1% of the amount determined by multiplying the participant’s Benefit Rate by the participant’s Contribution Hours for the Plan Year.

– **For service and on and after December 1, 2007 and before adoption of Rehabilitation Plan Schedule:**

- ❖ Employers that have not made required contribution rate increases: Same as accrual for service after August 31, 2003.
- ❖ Employers that have made required contribution rate increases: 1.5% of the amount determined by multiplying the participant’s Benefit Rate by the participant’s Contribution Hours for the Plan Year (up to 1,200 hours), plus 0.7% of the amount determined by multiplying the participant’s Benefit Rate by the participant’s Contribution Hours (over 1,200 hours). The 1.5% multiplier is applied to the first 1,200 hours at the highest Benefit Rate in effect during the Plan Year.

– **For service and on and after August 31, 2003 and before December 1, 2007:**

- ❖ 0.8571% of the amount determined by multiplying the participant’s Benefit Rate by the participant’s Contribution Hours (up to 1,400 hours), plus 0.3% of the amount determined by multiplying the participant’s Benefit Rate by the participant’s

Contribution Hours (over 1,400 hours). For participants in 55/30 Locals, 80% of the total contribution rate is subject to benefit accruals. The 0.8571% multiplier is applied to the first 1,400 hours at the highest Benefit Rate in effect during the Plan Year.

- ❖ Supplemental accruals:

  Locals are required to increase their contribution rates subject to benefit accruals by 10% annually for eligibility. Participants of Locals that make the required increases earn a supplemental accrual that brings the total accrual to twice the normal rate in the year following the increase.

– **For service and on and after December 31, 1999 and before September 1, 2003:**

- ❖ 1.7142% of the amount determined by multiplying the participant's Benefit Rate by the participant's Contribution Hours (up to 1,400 hours), plus 0.6% of the amount determined by multiplying the participant's Benefit Rate by the participant's Contribution Hours (over 1,400 hours). The 1.7142% multiplier is applied to the first 1,400 hours at the highest Benefit Rate in effect during the Plan Year.

– **– For service before January 1, 2000:**

- ❖ Benefit accrued according to the rules of the Plan in effect on December 31, 1999

– **Past service:**

- ❖ $10.00 for each year of Past Service Credit, if any, up to 10 years

- **Post-Normal Retirement Age Adjustment:** Regular 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.

Early retirement

- The following applies to all participants with an effective date of pension on or after February 1, 2014 retiring under an early retirement provision (Standard Early Retirement, Special Early Retirement, Age 62 Pension, 55/30 Pension, and 60/30 Pension).
- Previously, the provisions described for benefits accrued before January 1, 2014 were in effect. Participant may be eligible for different early retirement provisions for pre-2014 and post-2013 accrued benefits. Portions of the post-2013 accrued benefits may also be subject different early retirement provisions depending on the classification of employment of the participant's Contribution Hours.

Standard Early Retirement

- **Age Requirement:** 55
- **Service Requirement:** Fulfill any one of the following:
  - 10 years of Pension Credits, including at least five years of Future Service Credit, or
  - 10 years of Vesting Service, or
  - 15 years of Pension Credits, including at least 12 months of Future Service Credit
- **Amount:** Normal Retirement benefit reduced as described below.
  - **For benefits accrued on and after January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

❖ Default Option	Actuarially from age 65 (Unsubsidized Early Retirement Pension)
❖ First Alternative Option	6% per year from age 65
❖ Second Alternative Option	Actuarially from age 65 (Unsubsidized Early Retirement Pension)

  - **For benefits accrued before January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

❖ Default Schedule/Persons for Whom	Actuarially from age 65 (Unsubsidized Early Retirement Pension)
❖ First Alternative Schedule	6% per year from age 65
❖ Second Alternative Schedule	Actuarially from age 65 (Unsubsidized Early Retirement Pension)
❖ NIC	Actuarially from age 65 (Unsubsidized Early Retirement Pension)

Special Early Retirement

- **Age Requirement:** 55
- **Service Requirement:** Fulfill any one of the following:
  - 10 years of Pension Credits, including at least five years of Future Service Credit, or
  - 10 years of Vesting Service, or
  - 15 years of Pension Credits, including at least 12 months of Future Service Credit
- **Active Service Requirement:** Complete at least 3,500 hours of work in covered employment during the five consecutive calendar years immediately preceding retirement
- **Amount:** Normal Retirement benefit reduced as described below.
  - **For benefits accrued on and after January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

❖ Default Option	Unavailable
❖ First Alternative Option	6% per year from age 62
❖ Second Alternative Option	Unavailable

  - **For benefits accrued before January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

❖ Default Schedule/Persons for Whom	Unavailable
❖ First Alternative Schedule	6% per year from age 62
❖ Second Alternative Schedule	Unavailable
❖ NIC	Unavailable

Age 62 Pension

- **Age Requirement:** 62
- **Service Requirement:** Same as Special Early Retirement
- **Active Service Requirement:** Same as Special Early Retirement
- **Amount:** Described below.
  - **For benefits accrued on and after January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

❖ Default Option	Unavailable
❖ First Alternative Option	Unavailable
❖ Second Alternative Option	Normal Retirement Benefit amount

  - **For benefits accrued before January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

❖ Default Schedule/Persons for Whom	Unavailable
❖ First Alternative Schedule	Unavailable
❖ Second Alternative Schedule	Normal Retirement Benefit amount
❖ NIC	Normal Retirement Benefit amount

55/30 Pension

- **Age Requirement:** 55
- **Service Requirement:** 30 years of Future Service Credit with at least 60 months of the last 120 months of Future Service Credit subject to a 55/30 Rate
- **Active Service Requirement:** Complete at least 3,500 hours of work in covered employment at 55/30 Rate during the five consecutive calendar years immediately preceding retirement
- **Amount:** Described below.
  - **For benefits accrued on and after January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

    - Default Option: Unavailable
    - First Alternative Option: Normal Retirement Benefit amount
    - Second Alternative Option: Unavailable
  - **For benefits accrued before January 1, 2014:**

    Amount based on the participant's Home Local Schedule (Rehabilitation Plan Schedule) when the Plan was in critical status.

    - Default Schedule/Persons for Whom: Unavailable
    - First Alternative Schedule: Normal Retirement Benefit amount
    - Second Alternative Schedule: Unavailable
    - NIC: Unavailable

60/30 Pension

- **Age Requirement:** 60
- **Service Requirement:** Same as 55/30 Pension
- **Active Service Requirement:** Same as 55/30 Pension
- **Amount:** Described below.
  - **For benefits accrued on and after January 1, 2014:**

    Reductions based on the participant's Funding Improvement Plan Option, which depends upon the Schedule or Rehabilitation Plan provision which applied to the classification of employment when the Plan was in critical status.

    - ❖ Default Option — Unavailable
    - ❖ First Alternative Option — Unavailable
    - ❖ Second Alternative Option — Normal Retirement Benefit amount
  - **For benefits accrued before January 1, 2014:**

    Amount based on the participant's Home Local Schedule (Rehabilitation Plan Schedule) when the Plan was in critical status.

    - ❖ Default Schedule/Persons for Whom — Unavailable
    - ❖ First Alternative Schedule — Unavailable
    - ❖ Second Alternative Schedule — Normal Retirement Benefit amount
    - ❖ NIC — Unavailable

-

Vesting

- **Age Requirement:** None
- **Service Requirement:** Five years of Vesting Service.
- **Amount:** Regular or early pension accrued based on plan in effect when last active
- **Normal Retirement Age:** 65

Spouse's pre-retirement death benefit

- **Age Requirement:** None
- **Service Requirement:** Has attained Vested Status
- **Amount:** 50% of the monthly benefit the participant would have received had he/she terminated employment on his/her date of death and survived to his/her Early Retirement Date (or any later date elected by the spouse), retired and elected to receive benefits in the Normal Form of payment.
- **When Paid:** Immediately if participant's death occurred after attainment of his/her earliest retirement age, otherwise month in which the participant would have attained his/her earliest retirement age. If surviving spouse elects to receive payments before the month in which participant would have attained his/her earliest retirement age, the monthly benefit will be the actuarial equivalent of the amount described above.

Post-retirement death benefit

- 50% Joint and Survivor: If married, pension benefits are paid in the form of a 50% joint and survivor annuity unless the participant and spouse reject this form. If not rejected, the benefit amount otherwise payable is reduced to reflect the joint and survivor coverage. If not rejected, the spouse predeceases the employee, and the employee retired on March 1, 1999 or later, the employee's benefit amount will subsequently be increased to the unreduced amount payable ("pop-up" feature) had the joint and survivor coverage been rejected. If rejected, or if not married, benefits are payable for the life of the employee, or in any other available optional form elected by the employee in an actuarially equivalent amount.

  The "pop-up" feature is only applicable to pre-2014 benefits if the participant's Home Local Schedule/Rehabilitation Plan Schedule as of December 31, 2013 was the First Alternative Schedule or Second Alternative Schedule. It is only applicable to post-2013 benefits attributable to Contribution Hours worked under a collective bargaining agreement satisfying the required contribution rate increases under the Rehabilitation Plan First Alternative Schedule/Funding Improvement Plan First Alternative Option or Rehabilitation Plan Second Alternative Schedule/Funding Improvement Plan Second Alternative Option.

- 60-Month Certain: If the member has completed at least 15 years of Pension Credits before retirement and died within 5 years after retirement (if married, and taking joint and survivor pension, the spouse also died prior to receiving an amount equal to 60 times the amount of the pension the participant had been entitled), the pension benefit will continue to be paid to the participant's designated beneficiary until a total of 60 months payments had been made.

  The 60-month certain is only applicable to pre-2014 benefits if the participant's Home Local Schedule/Rehabilitation Plan Schedule as of December 31, 2013 was the First Alternative Schedule or Second Alternative Schedule. It is only applicable to post-2013 benefits attributable to Contribution Hours worked under a collective bargaining agreement satisfying the required contribution rate increases under the Rehabilitation Plan First Alternative Schedule/Funding Improvement Plan First Alternative Option or Rehabilitation Plan Second Alternative Schedule/Funding Improvement Plan Second Alternative Option.

Forms of benefits

The normal forms of payment are:

- Single life annuity for single participants, and
- 50% joint and survivor annuity with a "pop-up" feature for married participants (if applicable)

The available optional forms of payment are:

- Single life annuity with 60-month certain (if applicable)
- 50% joint and survivor annuity with a "pop-up" feature and 60-month certain (if applicable)
- 75% joint and survivor annuity with a "pop-up" feature (if applicable)
- 100% joint and survivor annuity with and without a "pop-up" feature (if applicable)

The "pop-up" feature and 60-month certain are only applicable to pre-2014 benefits if the participant's Home Local Schedule/Rehabilitation Plan Schedule as of December 31, 2013 was the First Alternative Schedule or Second Alternative Schedule. They are only applicable to post-2013 benefits attributable to Contribution Hours worked under a collective bargaining agreement satisfying the required contribution rate increases under the Rehabilitation Plan First Alternative Schedule/Funding Improvement Plan First Alternative Option or Rehabilitation Plan Second Alternative Schedule/Funding Improvement Plan Second Alternative Option.

Participation

After completion of 870 hours during a calendar year.

Past service credit

Service granted on the basis of days worked or amount earned in covered employment in calendar years prior to a participant's Contribution Date. For employers with a Contribution Date on or after January 1, 2000, the employer's initial contribution rate must be at least $0.50 per hour.

Future service credit

Service granted on the basis of hours of work in a calendar year after a Participant's Contribution Date in accordance with the following schedule:

Months of Future Service Credit	Hours of Work in Covered Employment During Calendar Year
0	Less than 100
1	100 - 199
2	200 - 299
3	300 - 399
4	400 - 499
5	500 - 599
6	600 - 699
7	700 - 799
8	800 - 899
9	900 - 999
10	1,000 - 1,099
11	1,100 - 1,199
12	1,200 & Over

Pension credit

Sum of the Past Service Credit and Future Service Credit (excluding service lost under the Plan's break in service rules).

Vesting credit

870 or more hours of work within a Plan year earns one year of Vesting Service.

Contribution rate

Varies from $0.05 to $19.88 per hour as of the valuation date. The average rate is $5.42 per hour as of December 31, 2023. 2.5% of certain employer contributions are allocated to 401(h) Medical Accounts but are subject to pension benefit accruals.

Cost of Living Adjustment (COLA)

- **Eligibility:** Pensioners and beneficiaries whose benefits are based on contribution rates that were increased by the Required Pension Fund Increase and who separated and retired from Covered Employment on or after January 1, 1991 and before December 1, 2001. No payment is made after January 1, 2008 unless the annual supplement had been in effect 60 months before that date (i.e., the benefit must have been payable on the participant's Allocation Date for 2002 – October 31, 2002).
- **Amount:** An annual supplement equal to 2% of the participant's total monthly payments for the 12 months immediately preceding the Allocation Date, multiplied by the number of whole years preceding the Allocation Date that the participant or beneficiary has received benefits, up to a maximum of 15 years. If the participant had elected a level income option, the 2% factor is applied to the benefit prior to the adjustment for the form of payment.
  - Effective July 1, 1995, no NPF COLA Benefit is payable with respect to any benefits accrued after June 30, 1995.

A participant who was retired and received an annual supplemental increase under the NPF COLA Benefit for the 2002 Allocation Date will continue to receive the benefit, but it will not exceed the supplement that was paid for the 2002 Allocation Date (i.e., it remains fixed at that amount).

Changes in plan provisions

There were no changes in plan provisions reflected in this actuarial valuation.

Exhibit E: Employer withdrawal liability worksheet for withdrawals from January 1, 2024 through December 31, 2024

Employer Name: ___________________

Year Ended December 31[1]	Unamortized Balance of Withdrawal Liability Basic Pools[2]	Unamortized Balance of Withdrawal Liability Reallocated Pools[3]	Unamortized Balance of Withdrawal Liability Affected Benefits Pools[4]	Total Plan Contributions During 5-Year Period Ending With Date Pool Established[5]	Obligated Employer Contributions During 5-Year Period Ending With Date Pool Established[6]	Liability Allocated: [(6) ÷ (5)] x [(2) + (3) + (4)]
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2004	$19,496,147	$223,541	$0	$1,193,749,349	$	$
2005	21,950,475	58,496	0	1,210,189,788		
2006	98,966,143	265,214	0	1,275,299,752		
2007	70,075,405	548,089	0	1,367,978,490		
2008	-41,662,228	210,673	0	1,498,738,835		
2009	152,813,069	1,526,153	10,227	1,579,997,694		
2010	194,693,348	3,214,757	14,567,591	1,618,194,282		
2011	236,002,047	2,735,703	2,744,899	1,654,151,482		
2012	307,921,628	3,857,171	62,980	1,689,780,634		
2013	80,075,680	3,314,689	724,584	1,706,299,106		
2014	340,380,086	7,298,088	0	1,791,923,116		
2015	484,317,021	5,254,196	0	1,947,039,073		
2016	413,819,455	477,199	0	2,112,433,865		

1 Years not shown have no withdrawal liability component.
2 Original value of changes in unfunded vested liability, written down 5% per year.
3 Original value of nonassessable and uncollectible withdrawal liability, written down 5% per year.
4 Original value of Plan's vested benefits eliminated each year due to the Rehabilitation Plan when the Plan was in critical (Red Zone) status, amortized over 15 years at the interest rate used for plan funding for the Plan Year for which the pool was established.
5 Total Fund contributions for the Plan year listed and the four preceding years, excluding contributions from significant withdrawn employers who withdrew on or before the date the pool was established and disregarding certain contribution rate increases per MPRA, if applicable.
6 Obligated employer contributions for the Plan year listed and the four preceding years, including contributions owed but not yet paid and disregarding certain contribution rate increases per MPRA, if applicable.
7 Does not reflect impact of partial withdrawal, limitation on annual payments or sale of assets

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Year Ended December 31[1]	Unamortized Balance of Withdrawal Liability Basic Pools[2]	Unamortized Balance of Withdrawal Liability Reallocated Pools[3]	Unamortized Balance of Withdrawal Liability Affected Benefits Pools[4]	Total Plan Contributions During 5-Year Period Ending With Date Pool Established[5]	Obligated Employer Contributions During 5-Year Period Ending With Date Pool Established[6]	Liability Allocated: [(6) ÷ (5)] x [(2) + (3) + (4)]
(1)	(2)	(3)	(4)	(5)	(6)	(7)
2017	$162,893,920	$7,454,137	$0	$2,284,129,430		
2018	263,477,630	529,488	0	2,491,259,424		
2019	252,186,377	1,102,366	0	2,672,928,838		
2020	609,614,366	9,295,371	0	2,758,301,968		
2021	-177,596,540	607,150	0	2,821,772,568		
2022	233,253,576	5,637,904	0	2,827,892,424		
2023	-770,802,941	3,358,491	0	2,871,614,799		
Total	**$2,951,874,664**	**$56,968,876**	**$18,110,281**			

	Component	Amount
A.	Allocable Share of Unfunded Vested Liability: (Sum of Column 7)	
B.	*De minimis*	$50,000
C.	Deductible: $100,000 + **(B)** – **(A),** but not greater than **(B)** nor less than zero	
D.	Allocable Share of Unfunded Vested Liability, Adjusted for *De minimis*: **(A)** – **(C)**, not less than zero and without regard to annual payment limitations[7]	

[1] Years not shown have no withdrawal liability component.
[2] Original value of changes in unfunded vested liability, written down 5% per year.
[3] Original value of nonassessable and uncollectible withdrawal liability, written down 5% per year.
[4] Original value of Plan's vested benefits eliminated each year due to the Rehabilitation Plan when the Plan was in critical (Red Zone) status, amortized over 15 years at the interest rate used for plan funding for the Plan Year for which the pool was established.
[5] Total Fund contributions for the Plan year listed and the four preceding years, excluding contributions from significant withdrawn employers who withdrew on or before the date the pool was established and disregarding certain contribution rate increases per MPRA, if applicable.
[6] Obligated employer contributions for the Plan year listed and the four preceding years, including contributions owed but not yet paid and disregarding certain contribution rate increases per MPRA, if applicable.
[7] Does not reflect impact of partial withdrawal, limitation on annual payments or sale of assets.

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