

MICHIGAN CARPENTERS'
PENSION FUND

Actuarial Valuation Report
For Plan Year Commencing
September 1, 2023

June 4, 2024

Board of Trustees
Michigan Carpenters' Pension Fund

Dear Trustees:

We have been retained by the Board of Trustees of the Michigan Carpenters' Pension Fund to perform annual actuarial valuations of the pension plan. This report presents the results of our actuarial valuation for the plan year beginning September 1, 2023. The valuation results contained herein are based on current plan provisions summarized in Appendix A, the actuarial assumptions and methods listed in Appendix B and on financial statements audited by Benda, Grace, Stulz & Company, P.C. Participant data was provided by TIC International Corporation. While we have reviewed the data for reasonableness in accordance with Actuarial Standards of Practice No. 23, we have not audited it. The data was relied on as being both accurate and comprehensive.

This report has been prepared in order to (1) assist the Trustees in evaluating the current actuarial position of the plan, (2) determine the minimum required and maximum deductible contribution amounts under Internal Revenue Code §431 and §404, (3) provide the fund's auditor with information necessary to comply with Accounting Standards Codification 960, and (4) document the plan's certified status under Internal Revenue Code §432 for the current year and provide the basis to certify such status for the subsequent year. In addition, information contained in this report will be used to prepare Schedule MB of Form 5500 that is filed annually with the IRS and could be used to calculate employer withdrawal liability. We are not responsible for the use of, or reliance upon, this report for any other purpose.

We have prepared this report in accordance with generally accepted actuarial principles and practices and have performed such tests as we considered necessary to assure the accuracy of the results. The results have been determined on the basis of actuarial assumptions that, in our opinion, are appropriate for the purposes of this report, are individually reasonable and in combination represent our best estimate of anticipated experience under the plan. Actuarial assumptions may be changed from previous valuations due to changes in mandated requirements, plan experience resulting in changes in expectations about the future, and/or other factors. An assumption change does not indicate that prior assumptions were unreasonable when made. For purposes of current liability calculations, assumptions are prescribed by regulation or statute. By relying on this valuation report, the Trustees confirm they have accepted the assumptions contained in the report.

The results are based on our best interpretation of existing laws and regulations and are subject to revision based on future regulatory or other guidance.

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.

United Actuarial Services, Inc. does not provide, nor charge for, investment, tax or legal advice. None of the comments made herein should be construed as constituting such advice. We are not aware of any direct or material indirect financial interest or relationship that could create a conflict of interest that would impair the objectivity of our work.

The undersigned actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are available to respond to any questions you may have about this report.

UNITED ACTUARIAL SERVICES, INC.

Enrolled Actuary



Martin, EA, MAAA
Consulting Actuary

Consultant



Pierce
Paul Bullock, ASA, EA, MAAA
President

TABLE OF CONTENTS

| | |
|---|------------|
| <i>PART I: SUMMARY OF RESULTS</i> | 5 |
| 5 - Year Summary of Valuation Results | 6 |
| 5 - Year Summary of Demographics | 7 |
| Changes From Prior Study | 8 |
| History of Major Assumptions | 9 |
| Experience vs. Assumptions | 10 |
| Plan Maturity | 11 |
| Unfunded Vested Benefits/Employer Withdrawal Liability | 12 |
| Contribution Allocation | 13 |
| Funding Standard Account Projection | 14 |
| Funded Ratio Projection | 15 |
| PPA Status Projection | 16 |
| Stochastic Projections | 17 |
| Sensitivity Analysis and Scenario/Stress Testing | 18 |
| <i>PART II: SUPPLEMENTAL STATISTICS</i> | 19 |
| Participant Data Reconciliation | 20 |
| Hours Worked During Plan Year | 21 |
| Contributions Made During Plan Year | 22 |
| Active Information | 23 |
| Inactive Vested Information | 24 |
| Retiree Information | 25 |
| <i>PART III: ASSET INFORMATION</i> | 27 |
| Market and Actuarial Fund Values | 28 |
| Flow of Funds | 29 |
| Investment Gain and Loss | 30 |
| Rate of Return on Fund Assets | 31 |
| <i>PART IV: ENROLLED ACTUARY'S REPORT</i> | 32 |
| Normal Cost/Actuarial Liability | 33 |
| Actuarial Liability Reconciliation/Projection | 34 |
| Funded Ratios | 35 |
| Funding Period | 36 |
| Current Liability | 37 |
| Funding Standard Account | 38 |
| Funding Standard Account Without Amortization Extension | 39 |
| Full Funding Limit | 40 |
| Minimum Required Contribution and Full Funding Credit | 41 |
| Maximum Deductible Contribution | 42 |
| History of Unfunded Vested Benefits | 43 |
| Termination by Mass Withdrawal | 44 |
| ASC 960 Information | 45 |
| <i>APPENDICES</i> | |
| Plan Provisions | Appendix A |
| Actuarial Assumptions and Methods | Appendix B |
| Minimum Funding Amortization Bases | Appendix C |
| Summary of Rules Under PPA, MPRA and ARPA | Appendix D |
| Glossary of Common Pension Terms | Appendix E |

PART I: SUMMARY OF RESULTS

5 - YEAR SUMMARY OF VALUATION RESULTS

| Actuarial Study as of September 1, | 2023 | 2022 | 2021 | 2020 | 2019 |
|---|-----------|-----------|---------|---------|---------|
| PPA funded status | Endnrd | Endnrd | Endnrd | Endnrd | Endnrd |
| Progress under FIP/RP | Yes | Yes | Yes | Yes | n/a |
| Improvements restricted* | Yes | Yes | Yes | Yes | Yes |
| Funded ratio | | | | | |
| Valuation report (AVA) | 68.3% | 67.8% | 66.0% | 62.0% | 60.5% |
| Valuation report (MVA) | 64.3% | 64.3% | 72.7% | 62.3% | 58.9% |
| PPA certification (AVA) | 68.7% | 67.8% | 65.8% | 61.9% | 62.6% |
| Proj. year of insolvency | None | None | None | None | None |
| Credit balance (\$ 000) | 51,987 | 65,895 | 83,715 | 106,935 | 129,775 |
| Date of first projected funding deficiency (with extension) | | | | | |
| Valuation report | None | 8/31/35 | None | 8/31/27 | 8/31/25 |
| PPA certification | None | None | None | None | 8/31/27 |
| Net investment return | | | | | |
| On market value | 4.88% | -7.64% | 21.51% | 10.87% | 1.31% |
| On actuarial value | 5.44% | 7.34% | 10.85% | 7.54% | 5.38% |
| Asset values (\$ 000) | | | | | |
| Market | 656,972 | 644,927 | 716,039 | 604,702 | 560,460 |
| Actuarial | 697,395 | 679,934 | 649,942 | 602,423 | 575,450 |
| Accum. ben. (\$ 000) | 1,021,251 | 1,002,810 | 984,871 | 970,946 | 951,503 |

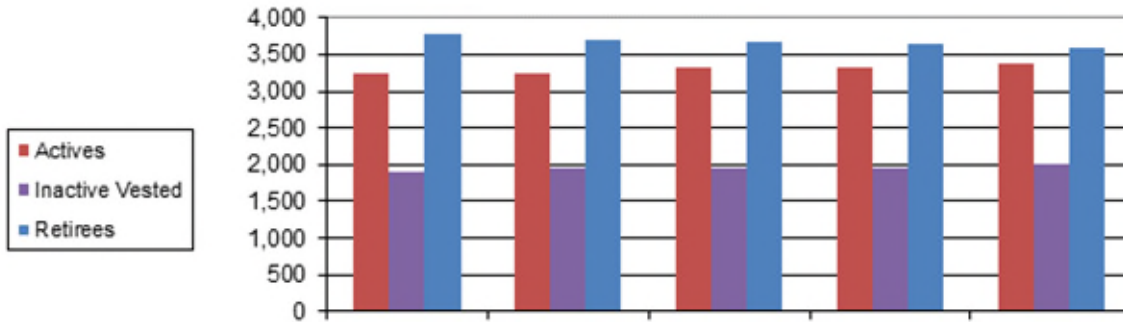
| Year | Assets (Actuarial) | Assets (Market) | Accumulated Benefits |
|------|--------------------|-----------------|----------------------|
| 2019 | 575,450 | 560,460 | 951,503 |
| 2020 | 602,423 | 604,702 | 970,946 |
| 2021 | 649,942 | 716,039 | 984,871 |
| 2022 | 679,934 | 644,927 | 1,002,810 |
| 2023 | 697,395 | 656,972 | 1,021,251 |

* Benefit improvement restrictions due to fund being in endangered status, as well as due to having an amortization extension. Restrictions in place until 9/1/2042 when bases with amortization extension have been fully amortized or until plan is in safe zone, whichever is later.

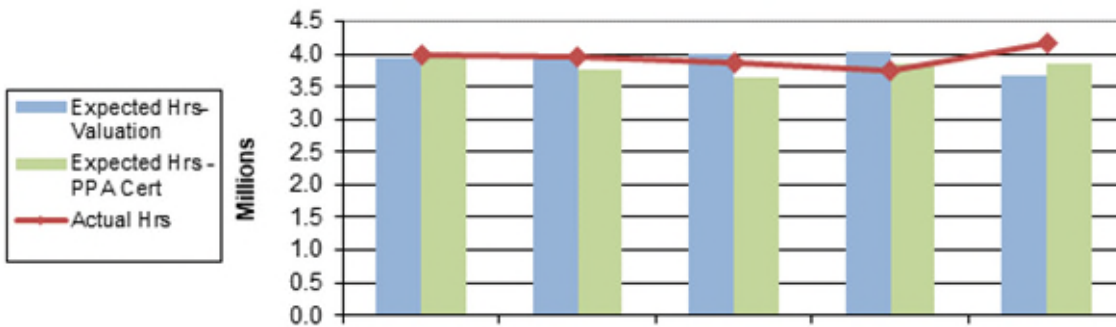
5 - YEAR SUMMARY OF DEMOGRAPHICS

| <i>Actuarial Study as of September 1,</i> | <i>2023</i> | <i>2022</i> | <i>2021</i> | <i>2020</i> | <i>2019</i> |
|---|-------------|-------------|-------------|-------------|-------------|
|---|-------------|-------------|-------------|-------------|-------------|

| | | | | | |
|---------------------------|-------|-------|-------|-------|-------|
| Participant counts | | | | | |
| <i>Active</i> | 3,245 | 3,236 | 3,333 | 3,313 | 3,372 |
| <i>Inactive vested</i> | 1,904 | 1,947 | 1,955 | 1,944 | 2,007 |
| <i>Receiving benefits</i> | 3,785 | 3,698 | 3,676 | 3,655 | 3,579 |
| <i>Total</i> | 8,934 | 8,881 | 8,964 | 8,912 | 8,958 |
| | | | | | |
| Average entry age | 29.1 | 29.5 | 30.2 | 30.4 | 30.3 |
| Average attained age | 39.1 | 39.9 | 40.5 | 41.2 | 41.2 |



| | | | | | |
|--|-------|-------|-------|-------|-------|
| Hours worked in prior plan year (thousands) | | | | | |
| <i>Expected hours valuation</i> | 3,940 | 3,980 | 3,994 | 4,036 | 3,673 |
| <i>Expected hours PPA cert</i> | 3,950 | 3,750 | 3,650 | 3,850 | 3,850 |
| <i>Actual hours worked</i> | 3,976 | 3,969 | 3,860 | 3,750 | 4,180 |



CHANGES FROM PRIOR STUDY

Changes in Plan Provisions

The plan provisions underlying this valuation are the same as those valued last year.

Changes in Actuarial Assumptions and Methods

The actuarial assumptions and methods used in this valuation differ from those used in the prior valuation in the following respects:

- The assumed mortality rates were adjusted from 120% to 110% for males and from 90% to 110% for females. Neither the base mortality table nor the mortality projection scale were changed. These percent adjustments incorporate credible plan experience into expected mortality.
- The assumed retirement rates were changed according to the schedule in Appendix B to represent our best estimate of future retirement patterns based on recent plan experience.
- The assumed withdrawal rates were changed according to the schedule in Appendix B to represent our best estimate of future withdrawal patterns based on recent plan experience.
- The expense load on ASC 960 liabilities was changed from 2.00% to 1.75% based on recent plan experience.
- The current liability interest rate was changed from 2.00% to 2.51%. The new rate is within established statutory guidelines.

Additionally, the projection assumptions used in this valuation differ from those used in the prior valuation in the following respects:

- The future hours assumption used for projection purposes was decreased from 3,950,000 for all years to 3,850,000 for all years. This reflects input from the Trustees regarding future industry activity as used for the 2023 PPA certification.
- The future return on fund assets used for projection purposes was increased from 6.50% to 7.50% for the first 10 years. The long-term return on fund assets for projection purposes and the ERISA rate of return assumption used to value liabilities remains at 7.50%. This provides our best estimate of the future rate of net investment return based on the Plan's current investment policy, asset allocation and a survey of capital market assumptions.
- The 2024 increase of the PBGC premium to \$37 per participant is now reflected for projection purposes. (The 2031 increase of the PBGC premium to \$52 per participant was already included in last year's projections.)

HISTORY OF MAJOR ASSUMPTIONS

| <i>Assumption</i> | <i>Actuarial Study as of September 1,</i> | | | | |
|--|---|---------------------|---------------------|-------------|-------------|
| | <i>2023</i> | <i>2022</i> | <i>2021</i> | <i>2020</i> | <i>2019</i> |
| Future rate of net investment return | 7.50% | 7.50% | 7.50% | 7.50% | 7.50% |
| Mortality table | PRI-2012 | PRI-2012 | PRI-2012 | PRI-2012 | RP-2006 |
| <i>Adjustment</i> | 110% (M) 110% (F) | 120% (M) 90% (F) | 120% (M) 90% (F) | 110% | 115% |
| <i>Projection scale</i> | MP-2021 | MP-2021 | MP-2021 | MP-2020 | MP-2019 |
| Future expenses | | | | | |
| <i>Initial year (\$ 000)</i> | \$1,365 | \$1,325 | \$1,350 | \$1,350 | \$1,350 |
| <i>Fut. annual increase</i> | 3.00% | 3.00% | 3.00% | 0.00% | 0.00% |
| Average future hourly contribution rate* | | | | | |
| <i>Credited</i> | \$10.06 | \$10.02 | \$9.99 | \$9.97 | \$9.94 |
| <i>Non-credited</i> | <u>3.39</u> | <u>3.39</u> | <u>3.32</u> | <u>3.31</u> | <u>3.50</u> |
| <i>Total</i> | \$13.45 | \$13.41 | \$13.31 | \$13.28 | \$13.44 |
| Average future annual hours | | | | | |
| <i>Vested</i> | 1,650 | 1,650 | 1,650 | 1,650 | 1,650 |
| <i>Non-vested</i> | 800 | 800 | 800 | 800 | 800 |
| Assumptions used for projections | | | | | |
| <i>Return, first 10 years</i> | 7.50% | 6.50% | 6.50% | 6.50% | 6.50% |
| <i>Annual hours (000)</i> | | | | | |
| <i>First year out</i> | 3,850 | 3,950 | 3,750 | 3,650 | 3,850 |
| <i>Second year out</i> | 3,850 | 3,950 | 3,850 | 3,750 | 3,850 |
| <i>Third & later years</i> | 3,850 | 3,950 | 3,850 | 3,850 | 3,850 |

* Actual average derived from application of assumptions specified in Appendix B.

EXPERIENCE VS. ASSUMPTIONS

Comparing the prior year's experience to assumptions provides indications as to why overall results may differ from those expected

Actuarial assumptions are used to project certain future events related to the pension plan (e.g. deaths, withdrawals, investment income, expenses, etc.). While actual results for a single plan year will rarely match expected experience, it is intended that the assumptions will provide a reasonable long term estimate of developing experience.

The following table provides a comparison of expected outcomes for the prior plan year with the actual experience observed during the same period. This display may provide insight as to why the plan's overall actuarial position may be different from expected.

| <i>Plan Year Ending August 31, 2023</i> | <i>Expected</i> | <i>Actual</i> |
|---|-----------------|---------------|
| Decrements | | |
| <i>Terminations</i> | | 783 |
| <i>less: Rehires</i> | | 117 |
| <i>Terminations (net of rehires)</i> | 565.4 | 666 |
| <i>Active retirements</i> | 66.3 | 70 |
| <i>Active disabilities</i> | 5.2 | - |
| <i>Pre-retirement deaths</i> | 21.8 | 16 |
| <i>Post-retirement deaths</i> | 159.2 | 167 |
| <i>Monthly benefits of deceased retirees</i> | \$ 204,900 | \$ 192,048 |
| Financial assumptions | | |
| <i>Rate of net investment return on actuarial value</i> | 7.50% | 5.44% |
| <i>Administrative expenses</i> | \$ 1,325,000 | \$ 1,345,682 |
| Other demographic assumptions | | |
| <i>Average retirement age from active (new retirees)</i> | 62.4 | 61.0 |
| <i>Average retirement age from inactive (new retirees)*</i> | 62.7 | 64.3 |
| <i>Average entry age (new entrants)</i> | 29.5 | 30.8 |
| <i>Hours worked per vested active</i> | 1,650 | 1,638 |
| <i>Hours worked per non-vested active</i> | 800 | 771 |
| <i>Total hours worked (valuation assumption)</i> | 3,940,300 | 3,975,723 |
| <i>Total hours worked (PPA certification assumption)</i> | 3,950,000 | 3,975,723 |
| Unfunded liability (gain)/loss | | |
| <i>(Gain)/loss due to asset experience</i> | | \$ 13,832,685 |
| <i>(Gain)/loss due to liability experience</i> | | 2,367,166 |
| <i>Total (gain)/loss</i> | | \$ 16,199,851 |

* Expected average based on the average for the total group of participants.

PLAN MATURITY

Measures of plan maturity can play a part in understanding risk and a plan's ability to recover from adverse experience

When a new pension plan is first established, its liabilities are typically limited to active plan participants. However, as people become vested and retire, a plan begins to develop liabilities attributable to nonactive participants (retirees and inactive vested participants). The process of adding nonactive liabilities (often referred to as "maturing")

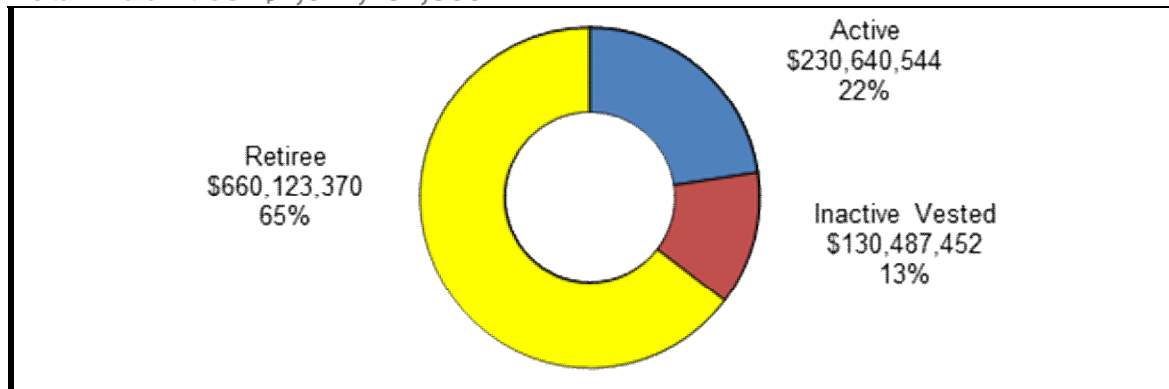
is a natural outgrowth of the operation of the plan. As a plan matures, its liabilities tend to balloon in relation to its contribution base, making it more difficult to correct for adverse outcomes by increasing contribution rates or reducing future benefit accruals.

Headcount ratios show the number of retiree or inactive participants supported by each active participant. While there is no hard and fast rule, we generally consider a plan to be mature if each active is supporting more than 1 retiree or more than 2 nonactives. A negative net cash flow (benefits payments and expenses greater than contributions) can also be an indicator of a mature plan. A negative cash flow, when expressed as a percentage of assets, in excess of the assumed rate of return on fund assets may not be sustainable in the long term.

| <i>Actuarial Study as of September 1,</i> | <i>2023</i> | <i>2022</i> | <i>2021</i> | <i>2020</i> | <i>2019</i> |
|---|-------------|-------------|-------------|-------------|-------------|
| Retiree/active headcount ratio | 1.17 | 1.14 | 1.10 | 1.10 | 1.06 |
| Nonactive/active headcount ratio | 1.75 | 1.74 | 1.69 | 1.69 | 1.66 |
| Cash flow | | | | | |
| <i>Contr.-ben.-exp. (\$000)</i> | (19,001) | (17,090) | (16,916) | (15,841) | (7,422) |
| <i>Percent of assets</i> | -2.89% | -2.65% | -2.36% | -2.62% | -1.32% |

Liabilities of Actives, Retirees, and Inactive Vesteds

Total Liabilities: \$1,021,251,366



UNFUNDED VESTED BENEFITS/EMPLOYER WITHDRAWAL LIABILITY

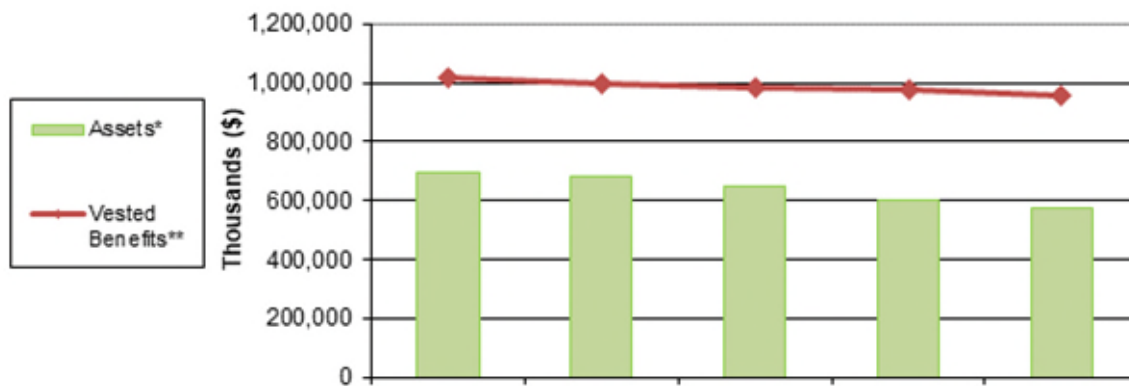
An employer withdrawing during the coming year may have withdrawal liability

The following table shows a history of the plan's unfunded vested benefits (UVB) required to compute a specific employer withdrawal liability under the presumptive method. If all unfunded vested benefits since the inception of the Multiemployer Pension Plan Amendments Act of 1980 (MPPAA) are zero (\$0) or less, there will be no withdrawal liability assessed to a withdrawing employer. Otherwise, an employer may be assessed withdrawal liability payments pursuant to MPPAA. The display does not reflect adjustments for prior employer withdrawals.

In accordance with IRC Section 432(e)(9)(A) and PBGC Technical Update 10-3, the impact of reducing adjustable benefits is reflected by adding the unamortized portion of the value of affected benefits (VAB) to the most recent year's unfunded vested benefits pool. An employer who is assessed withdrawal liability will be assessed a portion of the UVB and the VAB.

Presumptive Method (\$ 000)

| August 31, | 2023 | 2022 | 2021 | 2020 | 2019 |
|--------------------------|-----------|---------|---------|---------|---------|
| Vested benefits interest | 7.50% | 7.50% | 7.50% | 7.50% | 7.50% |
| Vested benefits | 1,008,960 | 988,779 | 970,469 | 961,724 | 940,669 |
| less: Asset value* | 697,395 | 679,934 | 649,942 | 602,423 | 575,450 |
| UVB | 311,565 | 308,845 | 320,527 | 359,301 | 365,219 |
| Unamortized VAB | 6,753 | 10,163 | 13,336 | 16,288 | 19,033 |
| UVB + VAB | 318,318 | 319,008 | 333,863 | 375,589 | 384,252 |



* Actuarial Value

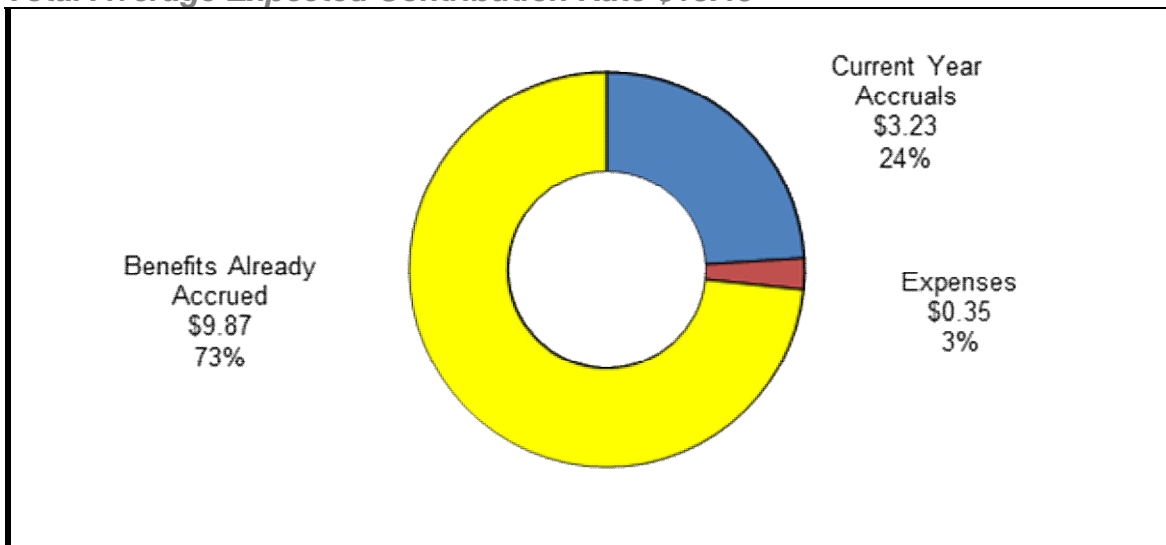
** Includes VAB

CONTRIBUTION ALLOCATION

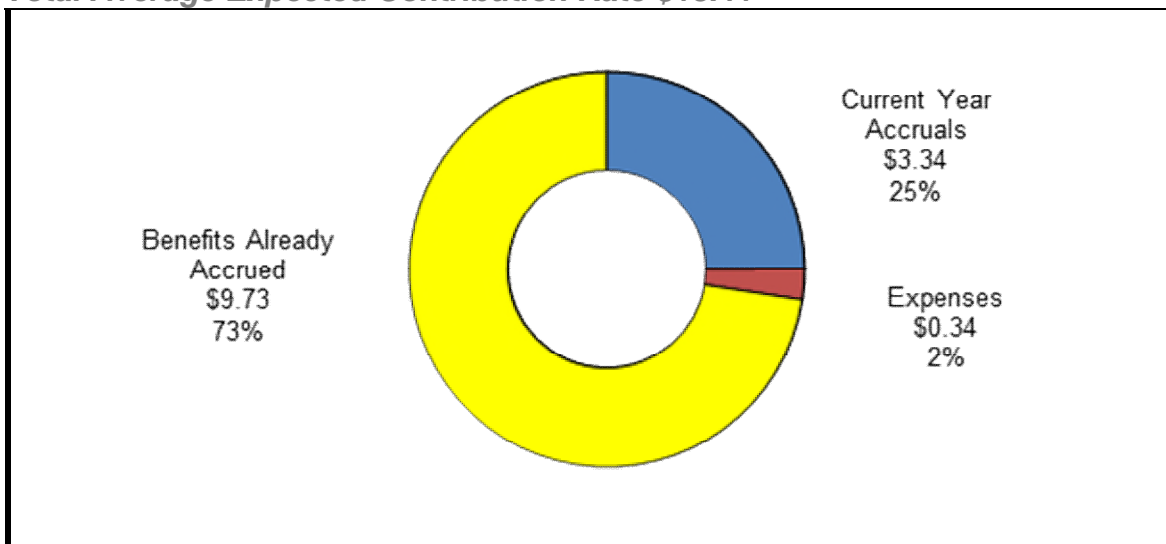
These graphs show how the contributions are being spent

The following allocation charts illustrate how the expected contribution rate for the coming plan year will be “spent” to pay for benefits being earned in the current year, plan expenses, and funding of past unfunded liabilities.

Contribution Allocation as of September 1, 2023
Total Average Expected Contribution Rate \$13.45



Contribution Allocation as of September 1, 2022
Total Average Expected Contribution Rate \$13.41



FUNDING STANDARD ACCOUNT PROJECTION

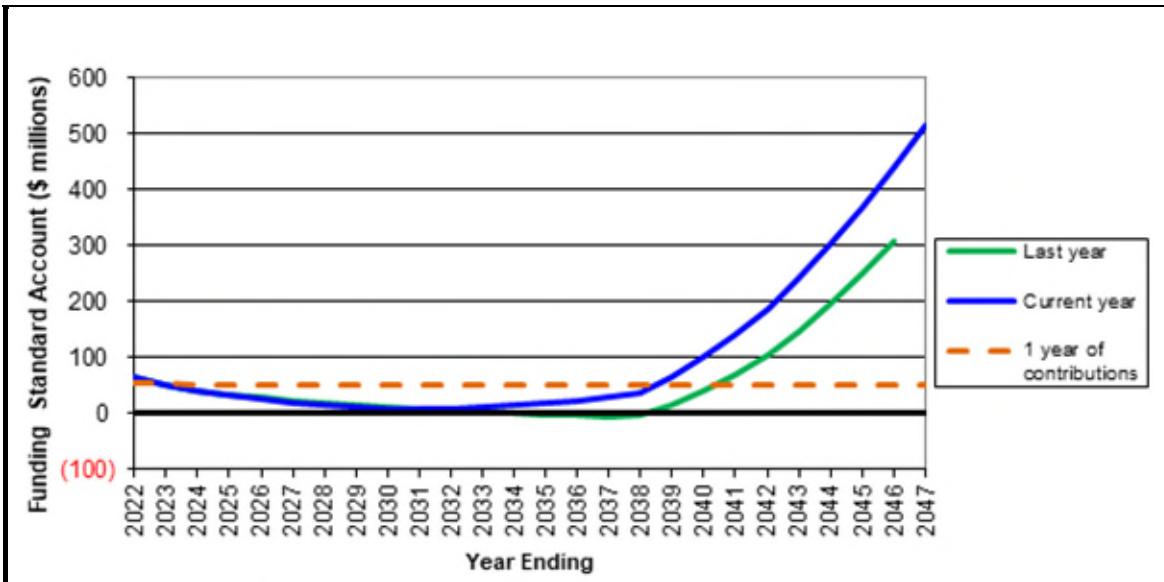
The funding standard account projection is a major driver of PPA status

The funding standard account (FSA) was established by ERISA as a means of determining compliance with minimum funding standards. The FSA is hypothetical in the sense that it does not represent actual assets held by a custodian.

Rather, a positive FSA balance (called a “credit balance”) means that the plan has exceeded minimum funding standards on a cumulative basis, while a negative balance (called a “funding deficiency”) means that the plan has fallen short of such standards.

Actuaries must project the plan’s FSA each year in order to determine PPA status. If a funding deficiency is projected in a future year, the plan could be forced into yellow (endangered) or red (critical) status depending how far into the future the first projected funding deficiency is. The plan’s FSA projection appears below. These projections are based on the assumptions summarized in the “Actuarial Assumptions used for Projections” section of Appendix B.

As a rule of thumb, UAS recommends in non-Critical status year that plans maintain a projected credit balance of at least one year’s contributions (shown as an orange dotted line in the graph below) in each future year. Maintaining a “cushion” in the Funding Standard Account helps minimize the risk of a surprise funding deficiency at the end of a non-Critical status plan year. Such a deficiency could trigger an excise tax payable directly by employers. If the Plan is in Critical status at the start of plan year, it is protected from these excise taxes so long as scheduled progress has been satisfied in at least one of the past three plan years.

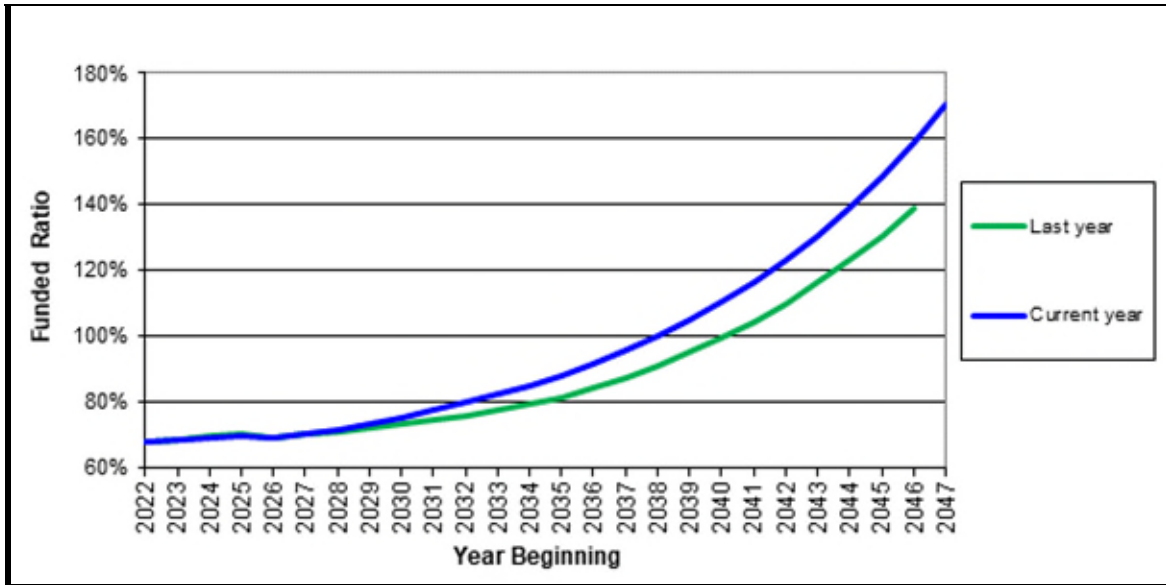


FUNDED RATIO PROJECTION

The plan's funded ratio is a major driver of PPA status

The funded ratio is defined as the actuarial value of plan assets divided by the plan's liabilities for accrued benefits. Along with the funding standard account projection, funded ratio is one of the two major drivers of PPA funded status. In order for a plan to enter the green zone (also called "safe" or "not endangered or critical") the funded ratio must be at least 80%. An insolvency, which is the plan year when the plan would run out of money, occurs if the funded ratio is projected to be 0%. In order for a plan to enter critical and declining status, an insolvency needs to be projected within 20 plan years of the PPA certification (it may need to be within 15 years under certain conditions), and the plan must meet one of the initial critical tests. The projection of the funded ratio appears below. These projections are based on the assumptions summarized in the "Actuarial Assumptions used for Projections" section of Appendix B.

According to the funding improvement plan, the plan has a funded ratio goal of 73.4% by September 1, 2035.



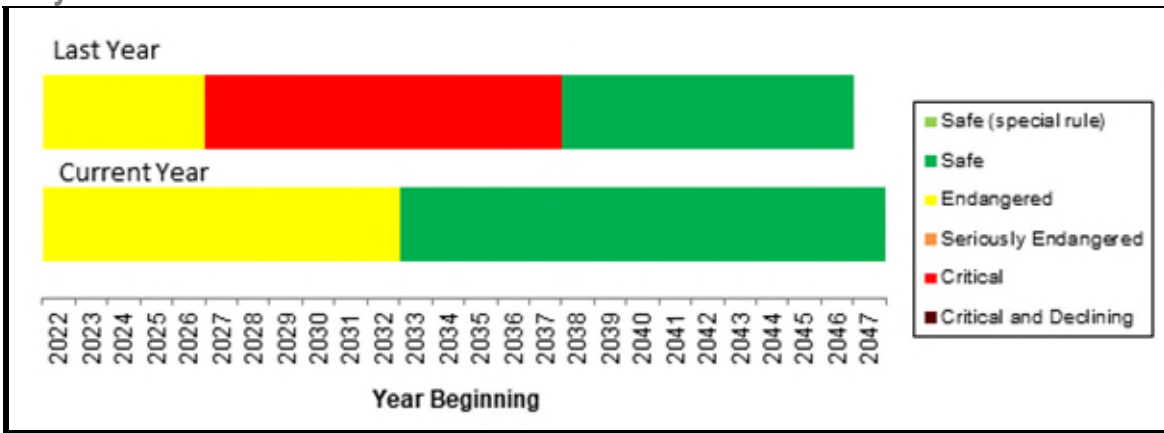
PPA STATUS PROJECTION

A plan that is not in green (i.e. safe) zone is subject to additional requirements and restrictions

The following graph shows the projection of PPA status based on the assumptions summarized in the “Actuarial Assumptions used for Projections” section of Appendix B. The projection is based on the current plan

and do not assume any changes in plan provisions or contribution rates, even if the plan moves to a worse PPA zone.

Projected PPA Status



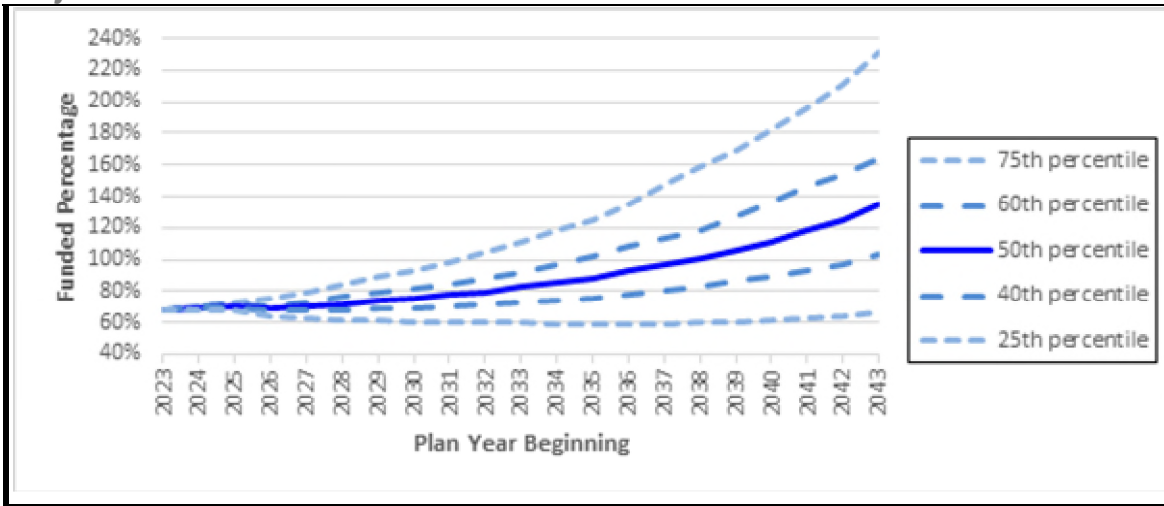
STOCHASTIC PROJECTIONS

Stochastic projections show the probability of being in a certain status or having a certain funded ratio.

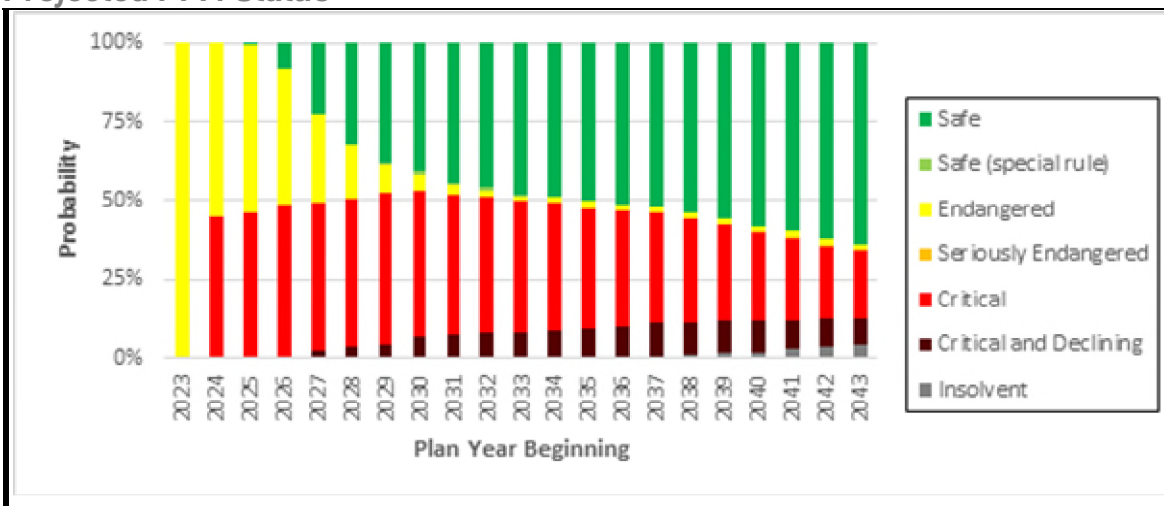
The stochastic projections below show the estimated probability of being in each status in each future year and the probability of being at a certain funded ratio based on the assumptions summarized in the "Actuarial Assumptions used for Projections" section

of Appendix B. The projections are based on the current plan and do not assume any changes in plan provisions or contribution rates, even if the plan moves to a worse PPA zone. Distribution of returns are based on the mean and standard deviation of the Plan's investment portfolio. Mean for years 1-10 are based on short-term expectations, and years 11-20 are based upon long-term projections.

Projected Funded Ratio



Projected PPA Status



SENSITIVITY ANALYSIS AND SCENARIO/STRESS TESTING

Sensitivity analysis along with scenario and stress testing can help Trustees gauge a plan's key risks

Sensitivity analysis studies the funding impact to the plan when a given assumption changes. *Scenario testing* studies the funding impact from actual experience for one or more possible outcomes. *Stress testing* studies the funding impact from poor experience. The sensitivity

analysis along with the scenario and stress testing below can be used to gauge a plan's key risks from investments and hours.

Currently, in order to project no funding deficiencies and maintain a valid funding improvement plan, the plan does not require a minimum contribution rate increase on June 1, 2024. In the table below we use this result to perform scenario and stress testing on the investment return assumption by assuming asset returns for the 2023-24 plan year of 17.00%, 7.50%, and -2.00%. The 7.50% return represents the assumed return on assets while the other two returns are 75% of one standard deviation from the expected return. Statistically, the return has about a 55% probability of being within this range for the year. The last column contains a threshold asset return below which the plan would not meet the funding goals of projecting an acceptable funding improvement plan along with no projected critical status. We also perform a sensitivity analysis on the future hours assumption by showing the effect of varying it by $\pm 5\%$.

Non-credited Hourly Contribution Rate Increase Needed on June, 1, 2024 to Avoid Red Zone and Maintain a Valid Funding Improvement Plan

| <i>Sensitivity Analysis Assumptions</i> | <i>Scenario and Stress Testing: Return for 2023-24 PY</i> | | | <i>2023-24 Min. Return to Meet Funding Goals</i> |
|---|--|---------------------|----------------------|---|
| | <i>17.00%</i> | <i>7.50%</i> | <i>-2.00%</i> | |
| <i>5% Lower Hours</i> 3,657,500 per year | None | \$0.45 | \$1.90 | 11.0% |
| <i>Baseline Hours</i> 3,850,000 per year | None | None | \$1.25 | 7.0% |
| <i>5% Higher Hours</i> 4,042,500 per year | None | None | \$0.60 | 2.5% |

Note that the preceding table shows sample solutions using a one-time non-credited contribution rate increase only. There are other possible solutions besides the provided contribution rate increase shown above, including a credited increase, a combination of credited and non-credited increases, or a schedule of contribution rate increases over multiple years. Benefit reductions could also be added to lower or eliminate the necessary contribution rate increase(s).

PART II: SUPPLEMENTAL STATISTICS

PARTICIPANT DATA RECONCILIATION

The participant data reconciliation table below provides information as to how the plan's covered population changed since the prior actuarial study. Such factors as the number of participants retiring, withdrawing and returning to work have an impact on the actuarial position of the pension fund.

| <i>Participants Valued As</i> | <i>Active</i> | <i>Inactive Vested</i> | <i>Receiving Benefits</i> | <i>Total Valued</i> |
|-----------------------------------|---------------|----------------------------|-------------------------------|-------------------------|
| September 1, 2022 | 3,236 | 1,947 | 3,698 | 8,881 |
| Change due to: | | | | |
| <i>New hire</i> | 750 | - | - | 750 |
| <i>Rehire</i> | 117 | (34) | - | 83 |
| <i>Termination</i> | (783) | 114 | - | (669) |
| <i>Disablement</i> | - | (5) | 5 | - |
| <i>Retirement</i> | (70) | (111) | 181 | - |
| <i>Death</i> | (5) | (11) | (167) | (183) |
| <i>Cash out</i> | - | - | - | - |
| <i>New beneficiary</i> | - | 5 | 67 | 72 |
| <i>Certain pd. expired</i> | - | - | (1) | (1) |
| <i>Data adjustment*</i> | - | (1) | 2 | 1 |
| Net change | 9 | (43) | 87 | 53 |
| September 1, 2023 | 3,245 | 1,904 | 3,785 | 8,934 |

* Inactive vested data adjustment: Addition of 3 inactive vested participants no longer receiving disability; less 1 deferred beneficiary who was confirmed as no longer being due a benefit, 1 previously assumed deferred beneficiary confirmed to be an active participant, 1 inactive vested who was confirmed as not being vested, and 1 inactive vested who was confirmed as being reciprocity.

Receiving benefits data adjustment: Addition of 2 retirees who were previously assumed to be deceased, 2 retirees not previously reported, 1 retiree previously thought to be nonvested; less 3 participants no longer receiving disability benefits and are now inactive vested.

HOURS WORKED DURING PLAN YEAR

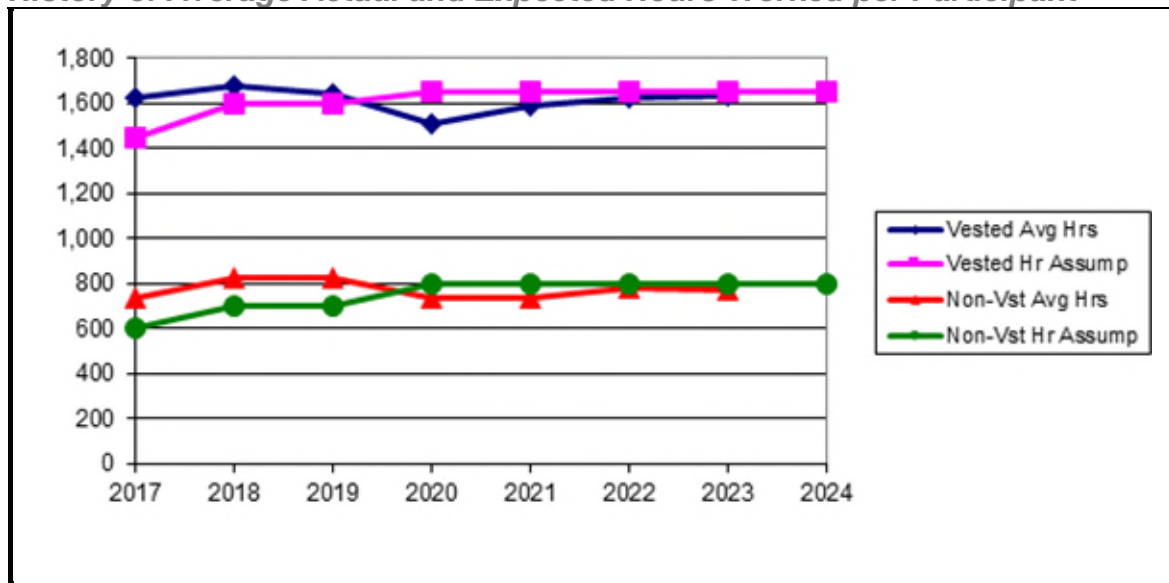
Hours Worked Per Participant

| Plan Year Ending August 31, 2023 | Number | Hours Worked | Average Hours Worked |
|-------------------------------------|--------|--------------|-------------------------|
| Actives | | | |
| Vested | 1,618 | 2,651,059 | 1,638 |
| Non-vested, continuing | 877 | 933,384 | 1,064 |
| Non-vested, new entrant | 750 | 321,521 | 429 |
| Total active | 3,245 | 3,905,964 | 1,204 |
| Others | 94 | 69,759 | 742 |
| Total for plan year | 3,339 | 3,975,723 | 1,191 |

History of Total Actual and Expected Hours Worked (Thousands)

| Plan Year Ending August 31, | 2024 | 2023 | 2022 | 2021 | 2020 |
|--------------------------------|-------|-------|-------|-------|-------|
| Expected hours valuation | 3,947 | 3,940 | 3,980 | 3,994 | 4,036 |
| Expected hours PPA cert | 3,850 | 3,950 | 3,750 | 3,650 | 3,850 |
| Actual hours worked | n/a | 3,976 | 3,969 | 3,860 | 3,750 |

History of Average Actual and Expected Hours Worked per Participant



CONTRIBUTIONS MADE DURING PLAN YEAR

Employer Credited Contributions Reported in Employee Data

| <i>Plan Year Ending August 31, 2023</i> | <i>Number</i> | <i>Credited Contributions Reported</i> |
|---|---------------|--|
| Actives | | |
| <i>Vested</i> | 1,618 | \$ 26,883,901 |
| <i>Non-vested, continuing</i> | 877 | 9,272,826 |
| <i>Non-vested, new entrant</i> | 750 | 3,204,135 |
| Total valued as active | 3,245 | 39,360,862 |
| Others | 94 | 654,441 |
| Total for plan year | 3,339 | \$ 40,015,303 |

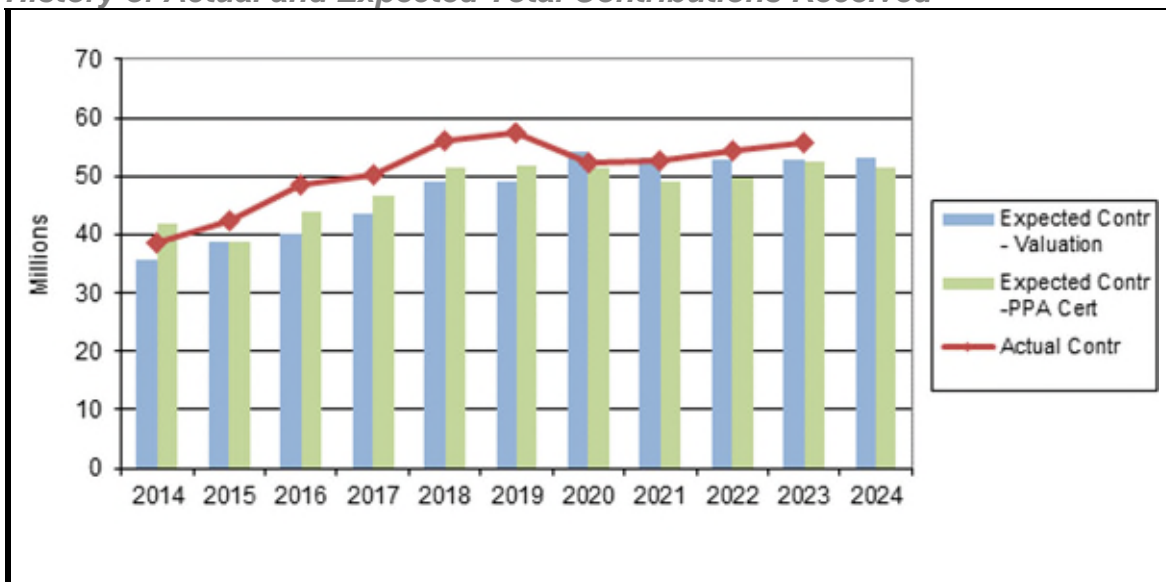
| | |
|--|-----------------|
| Average credited hourly contribution rate | \$ 10.06 |
|--|-----------------|

Comparison with Audited Employer Contributions

| | |
|--|---------------|
| Employer credited contributions reported in data | \$ 40,015,303 |
| Adjusted total employer contributions reported* | \$ 53,446,770 |
| Total audited employer contributions** | \$ 55,570,179 |
| Percent reported | 96% |

* Adjusted to reflect the reported non-credited contributions.
 ** Excludes employer withdrawal liability payments.

History of Actual and Expected Total Contributions Received



ACTIVE INFORMATION

Active Participants by Age and Service as of September 1, 2023

| Age | Years of Service | | | | | | | | | | Total | |
|-----------------------------------|-------------------------|------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|------------|--------------|-----|
| | <1 | 1-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40+ | | |
| < 25 | 109 | 285 | 33 | - | - | - | - | - | - | - | - | 427 |
| 25-29 | 70 | 174 | 145 | 5 | - | - | - | - | - | - | - | 394 |
| 30-34 | 59 | 156 | 120 | 28 | 5 | - | - | - | - | - | - | 368 |
| 35-39 | 52 | 106 | 105 | 40 | 20 | 3 | - | - | - | - | - | 326 |
| 40-44 | 45 | 59 | 89 | 45 | 41 | 45 | 12 | - | - | - | - | 336 |
| 45-49 | 27 | 46 | 61 | 27 | 36 | 49 | 59 | 6 | - | - | - | 311 |
| 50-54 | 24 | 38 | 35 | 18 | 35 | 64 | 77 | 28 | 8 | - | - | 327 |
| 55-59 | 18 | 37 | 30 | 20 | 24 | 40 | 81 | 36 | 32 | - | - | 318 |
| 60-64 | 7 | 19 | 15 | 6 | 13 | 28 | 35 | 6 | 1 | 2 | - | 132 |
| 65-69 | 1 | 1 | 3 | 1 | 1 | 2 | 1 | - | - | - | - | 10 |
| 70+ | 2 | - | - | - | - | - | - | - | - | - | - | 2 |
| Totals | 414 | 921 | 636 | 190 | 175 | 231 | 265 | 76 | 41 | 2 | 2,951 | |
| Unrecorded DOB | 252 | 42 | - | - | - | - | - | - | - | - | - | 294 |
| Total Active Lives | 666 | 963 | 636 | 190 | 175 | 231 | 265 | 76 | 41 | 2 | 3,245 | |

INACTIVE VESTED INFORMATION

Inactive Vested Participants by Age as of September 1, 2023

| <i>Age Group</i> | <i>Number</i> | <i>Estimated Monthly Deferred Vested Benefits*</i> | |
|-----------------------------|---------------|--|-----------|
| < 30 | 18 | \$ | 14,660 |
| 30-34 | 27 | | 22,690 |
| 35-39 | 84 | | 54,506 |
| 40-44 | 173 | | 121,002 |
| 45-49 | 252 | | 190,645 |
| 50-54 | 340 | | 283,479 |
| 55-59 | 410 | | 358,305 |
| 60-64 | 447 | | 423,921 |
| 65-69 | 121 | | 94,716 |
| 70+ | 32 | | 15,623 |
| Totals | 1,904 | | 1,579,547 |
| Unrecorded birth date | - | | - |
| Total inactive vested lives | 1,904 | \$ | 1,579,547 |

* Amount payable at assumed retirement age as used in the valuation process.

RETIREE INFORMATION

Benefits Being Paid by Form of Payment as of September 1, 2023

| Form of Payment | Number | Monthly Benefits Being Paid | | | |
|------------------------|---------------|------------------------------------|-----------------|-----------------|-----------------|
| | | Total | Average | Smallest | Largest |
| Life only* | 1,395 | \$ 2,373,800 | \$ 1,702 | \$ 12 | \$ 6,949 |
| Joint & survivor | 1,492 | 3,031,526 | 2,032 | 31 | 6,711 |
| Disability | 61 | 23,995 | 393 | 145 | 750 |
| Beneficiaries | 837 | 699,764 | 836 | 20 | 4,640 |
| Totals | 3,785 | \$ 6,129,085 | \$ 1,619 | \$ 12 | \$ 6,949 |

Retirees by Age and Form of Payment as of September 1, 2023

| Age Group | Form of Benefits Being Paid | | | | |
|------------------|------------------------------------|-----------------------------|-------------------|----------------------|--------------|
| | Life Only* | Joint & Survivor | Disability | Beneficiaries | Total |
| < 40 | - | - | - | 2 | 2 |
| 40-44 | - | - | 2 | - | 2 |
| 45-49 | - | - | 2 | 2 | 4 |
| 50-54 | - | - | 8 | 12 | 20 |
| 55-59 | 27 | 28 | 25 | 26 | 106 |
| 60-64 | 174 | 188 | 24 | 80 | 466 |
| 65-69 | 412 | 406 | - | 148 | 966 |
| 70-74 | 353 | 353 | - | 122 | 828 |
| 75-79 | 215 | 226 | - | 125 | 566 |
| 80-84 | 113 | 152 | - | 122 | 387 |
| 85-89 | 74 | 102 | - | 107 | 283 |
| 90-94 | 24 | 27 | - | 74 | 125 |
| 95+ | 3 | 10 | - | 17 | 30 |
| Totals | 1,395 | 1,492 | 61 | 837 | 3,785 |

* Includes retirees receiving life and certain benefits.

RETIREE INFORMATION (CONT.)

**Age of Participants Retired During Last 5 Plan Years
(excludes beneficiaries and disability retirements)**

| Age at Retirement | Plan Year Ending August 31, | | | | |
|-------------------|-----------------------------|------|------|------|------|
| | 2023 | 2022 | 2021 | 2020 | 2019 |
| < 58 | - | - | - | - | - |
| 58 | 29 | 26 | 21 | 34 | 28 |
| 59 | 9 | 9 | 7 | 15 | 3 |
| 60 | 8 | 7 | 10 | 12 | 17 |
| 61 | 16 | 7 | 7 | 12 | 8 |
| 62 | 10 | 13 | 12 | 12 | 13 |
| 63 | 11 | 4 | 6 | 9 | 3 |
| 64 | 11 | 8 | 6 | 5 | 3 |
| 65 | 63 | 34 | 57 | 51 | 40 |
| 66+ | 18 | 13 | 15 | 20 | 7 |
| Totals | 175 | 121 | 141 | 170 | 122 |

| | | | | | |
|------------------------|------|------|------|------|------|
| Average retirement age | 63.0 | 62.6 | 63.1 | 62.6 | 62.2 |
|------------------------|------|------|------|------|------|

PART III: ASSET INFORMATION

MARKET AND ACTUARIAL FUND VALUES

Asset information extracted from the fund's financial statements audited by Benda, Grace, Stulz & Company, P.C.

***Market/Actuarial Value of
Fund Investments
as of August 31,***

| | <i>2023</i> | <i>2022</i> | <i>2021</i> |
|---|--------------------|--------------------|--------------------|
| Invested assets | | | |
| <i>Common stock</i> | \$ 48,010,049 | \$ 56,564,365 | \$ 61,946,330 |
| <i>Common collective trusts</i> | 19,414,050 | 21,390,239 | 20,542,185 |
| <i>Limited partnerships</i> | 293,948,152 | 259,201,288 | 249,869,703 |
| <i>Mutual funds</i> | 193,910,915 | 209,156,869 | 276,249,771 |
| <i>Hedge fund of funds</i> | 82,106,752 | 82,093,876 | 89,550,345 |
| <i>Insurance co. sep. accounts</i> | 3,371,585 | 3,294,390 | 3,263,153 |
| <i>Real estate collective trusts</i> | 3,344,406 | 3,429,956 | 3,877,580 |
| <i>Other</i> | 9,629,223 | 7,224,537 | 8,166,346 |
| | 653,735,132 | 642,355,520 | 713,465,413 |
| Net receivables* | 3,236,757 | 2,571,932 | 2,573,675 |
| Market value | \$ 656,971,889 | \$ 644,927,452 | \$ 716,039,088 |
| Fund assets - Actuarial value | | | |
| <i>Market value</i> | \$ 656,971,889 | \$ 644,927,452 | \$ 716,039,088 |
| <i>less: Deferred investment gains and (losses)</i> | (40,422,850) | (35,006,487) | 66,096,782 |
| Actuarial value | \$ 697,394,739 | \$ 679,933,939 | \$ 649,942,306 |
| Actuarial value as a percentage of market value | 106.15% | 105.43% | 90.77% |

* Equals receivables, less any liabilities

FLOW OF FUNDS

Asset information extracted from the fund's financial statements audited by Benda, Grace, Stulz & Company, P.C.

| <i>Plan Year Ending August 31,</i> | <i>2023</i> | <i>2022</i> | <i>2021</i> |
|---|--------------------|--------------------|--------------------|
| Market value at beginning of plan year | \$ 644,927,452 | \$ 716,039,088 | \$ 604,702,259 |
| Additions | | | |
| <i>Employer contributions</i> | 55,611,131 | 54,471,887 | 52,732,966 |
| <i>Net investment income*</i> | 31,033,893 | (54,030,600) | 128,243,961 |
| <i>Other income</i> | 11,709 | 9,128 | 8,405 |
| | 86,656,733 | 450,415 | 180,985,332 |
| Deductions | | | |
| <i>Benefits paid</i> | 73,266,614 | 70,235,879 | 68,377,243 |
| <i>Net expenses*</i> | 1,345,682 | 1,326,172 | 1,271,260 |
| | 74,612,296 | 71,562,051 | 69,648,503 |
| Net increase (decrease) | 12,044,437 | (71,111,636) | 111,336,829 |
| Adjustment | - | - | - |
| Market value at end of plan year | \$ 656,971,889 | \$ 644,927,452 | \$ 716,039,088 |
| Cash flow | | | |
| <i>Contr.-ben.-exp.</i> | (19,001,165) | (17,090,164) | (16,915,537) |
| <i>Percent of assets</i> | -2.89% | -2.65% | -2.36% |
| Estimated net investment return | | | |
| <i>On market value</i> | 4.88% | -7.64% | 21.51% |
| <i>On actuarial value</i> | 5.44% | 7.34% | 10.85% |

* Investment expenses have been offset against gross investment income.

INVESTMENT GAIN AND LOSS

**Investment Gain or Loss
Plan Year Ending August 31, 2023**

| | | |
|---|----|--------------|
| Expected market value at end of plan year | | |
| <i>Market value at beginning of plan year</i> | \$ | 644,927,452 |
| <i>Employer contributions and non-investment income</i> | | 55,622,840 |
| <i>Benefits and expenses paid</i> | | (74,612,296) |
| <i>Expected investment income (at 7.50% rate of return)</i> | | 47,657,454 |
| | | 673,595,450 |
| Actual market value at end of plan year | | 656,971,889 |
| less: Expected market value | | 673,595,450 |
| Investment gain or (loss) | \$ | (16,623,561) |

History of Gains and (Losses)

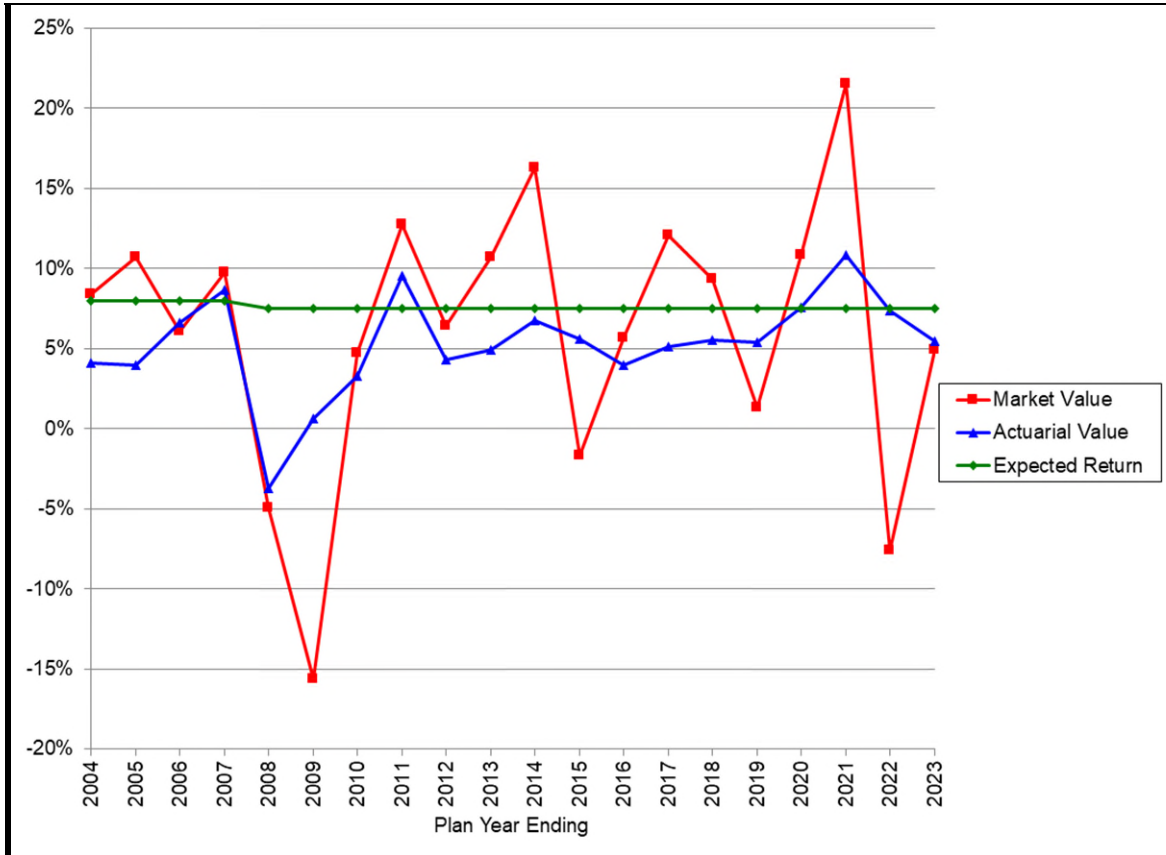
| <i>Plan Year Ending August 31,</i> | <i>Investment Gain or (Loss)</i> | <i>Amount Recognized This Year</i> |
|--|--|--|
| 2023 | \$ (16,623,561) | \$ (3,324,712) |
| 2022 | (107,092,993) | (21,418,599) |
| 2021 | 83,525,309 | 16,705,062 |
| 2020 | 18,608,354 | 3,721,671 |
| 2019 | (34,453,102) | (6,890,620) |
| Total | \$ (56,035,993) | \$ (11,207,198) |

Deferred Investment Gains and (Losses)

| <i>Plan Year Ending August 31,</i> | <i>Amount of Gain or (Loss) Deferred as of August 31,</i> | | | |
|--|---|-----------------|-----------------|----------------|
| | <i>2023</i> | <i>2024</i> | <i>2025</i> | <i>2026</i> |
| 2023 | \$ (13,298,849) | \$ (9,974,137) | \$ (6,649,424) | \$ (3,324,712) |
| 2022 | (64,255,796) | (42,837,197) | (21,418,599) | - |
| 2021 | 33,410,124 | 16,705,062 | - | - |
| 2020 | 3,721,671 | - | - | - |
| Totals | \$ (40,422,850) | \$ (36,106,272) | \$ (28,068,023) | \$ (3,324,712) |

RATE OF RETURN ON FUND ASSETS

Historical Rates of Net Investment Return



The following table shows average rates of return over various periods calculated on a geometric average basis. These statistics may not be appropriate for evaluating a Plan's rate of return assumption as such assumption is forward-looking whereas the statistics are historical. Furthermore, these statistics do not reflect the internal rate of return actually experienced by the Fund over these periods.

Average Rates of Net Investment Return (geometric average)

| <i>Period</i> | <i>Return on Market Value</i> | | <i>Return on Actuarial Value</i> | |
|---------------|---------------------------------|-------------|----------------------------------|-------------|
| | <i>Period Ending August 31,</i> | | <i>Period Ending August 31,</i> | |
| | <i>2023</i> | <i>2022</i> | <i>2023</i> | <i>2022</i> |
| One year | 4.88% | -7.64% | 5.44% | 7.34% |
| 5 years | 5.74% | 6.63% | 7.29% | 7.31% |
| 10 years | 6.94% | 7.52% | 6.34% | 6.28% |
| 15 years | 5.69% | 5.00% | 5.72% | 5.08% |
| 20 years | 5.73% | 5.91% | 5.24% | 5.21% |

PART IV: ENROLLED ACTUARY'S REPORT

NORMAL COST/ACTUARIAL LIABILITY

| <i>Normal Cost as of September 1,</i> | <i>2023</i> | <i>2022</i> |
|--|----------------------|----------------------|
| Benefit accruals | \$ 12,285,974 | \$ 12,680,565 |
| Anticipated administrative expenses (beg. of year) | 1,315,422 | 1,277,108 |
| Total normal cost | \$ 13,601,396 | \$ 13,957,673 |

| <i>Unfunded Actuarial Liability as of September 1,</i> | <i>2023</i> | <i>2022</i> |
|---|-----------------------|-----------------------|
| Actuarial liability | | |
| <i>Participants currently receiving benefits</i> | \$ 660,123,370 | \$ 640,055,536 |
| <i>Inactive vested participants</i> | 130,487,452 | 130,534,004 |
| <i>Active participants</i> | 230,640,544 | 232,220,562 |
| | 1,021,251,366 | 1,002,810,102 |
| <i>less: Fund assets (actuarial value)</i> | 697,394,739 | 679,933,939 |
| Unfunded actuarial liability | \$ 323,856,627 | \$ 322,876,163 |

ACTUARIAL LIABILITY RECONCILIATION/PROJECTION

Reconciliation of Unfunded Actuarial Liability

| | |
|---|----------------|
| Expected unfunded actuarial liability as of August 31, 2023 | |
| <i>Unfunded actuarial liability as of September 1, 2022</i> | \$ 322,876,163 |
| <i>Normal cost (including expenses)</i> | 13,957,673 |
| <i>Actual contributions</i> | (55,611,131) |
| <i>Interest to end of plan year</i> | 23,177,126 |
| | 304,399,831 |
| | |
| Increase (decrease) due to: | |
| <i>Experience (gain) or loss</i> | 16,199,851 |
| <i>Plan amendment</i> | - |
| <i>Change in actuarial assumptions</i> | 3,256,945 |
| <i>Change in actuarial method</i> | - |
| Net increase (decrease) | 19,456,796 |
| | |
| Unfunded actuarial liability as of September 1, 2023 | \$ 323,856,627 |

Projection of Actuarial Liability to Year End

| | |
|--|------------------|
| Actuarial liability as of September 1, 2023 | \$ 1,021,251,366 |
| | |
| Expected increase (decrease) due to: | |
| <i>Normal cost (excluding expenses)</i> | 12,285,974 |
| <i>Benefits paid</i> | (80,943,622) |
| <i>Interest on above</i> | (2,113,938) |
| <i>Interest on actuarial liability</i> | 76,593,852 |
| Net expected increase (decrease) | 5,822,266 |
| | |
| Expected actuarial liability as of August 31, 2024 | \$ 1,027,073,632 |

FUNDED RATIOS

| <i>Present Value of Accumulated Benefits/ Funded Ratios Actuarial Study as of September 1,</i> | <i>2023</i> | <i>2022</i> |
|--|------------------|------------------|
| Present value of vested accumulated benefits | | |
| <i>Participants currently receiving benefits</i> | \$ 660,123,370 | \$ 640,055,536 |
| <i>Inactive vested participants</i> | 129,325,347 | 129,218,783 |
| <i>Active participants</i> | 219,511,475 | 219,504,501 |
| Total | 1,008,960,192 | 988,778,820 |
| Nonvested accumulated benefits | 12,291,174 | 14,031,282 |
| Present value of all accumulated benefits | \$ 1,021,251,366 | \$ 1,002,810,102 |
| Market value of assets | \$ 656,971,889 | \$ 644,927,452 |
| Funded ratios (Market value) | | |
| <i>Vested benefits</i> | 65.1% | 65.2% |
| <i>All accumulated benefits</i> | 64.3% | 64.3% |
| Actuarial value of assets | \$ 697,394,739 | \$ 679,933,939 |
| Funded ratios (Actuarial value used for PPA) | | |
| <i>Vested benefits</i> | 69.1% | 68.8% |
| <i>All accumulated benefits</i> | 68.3% | 67.8% |
| Interest rate used to value benefits | 7.50% | 7.50% |

FUNDING PERIOD

The funding period is the approximate number of years that would be required to completely fund the unfunded entry age normal actuarial liability if future plan experience occurs according to the assumptions. The funding period is an indicator of the long term financial soundness of the plan. Historically, funds often targeted a maximum funding period of up to 20 years. Today, asset losses are being paid off over a maximum of 15 years and are the primary driver for ERISA minimum funding. An ultimate target of no more than 10 years is recommended. A lower, more conservative funding period target can be chosen. As the funding period drops, the risk of having future funding issues also diminishes.

Funding Period Calculation

| <i>Actuarial Study as of September 1,</i> | <i>2023</i> | <i>2022</i> |
|--|--------------------|--------------------|
| Unfunded actuarial liability | | |
| <i>Actuarial liability</i> | \$ 1,094,065,509 | \$ 1,084,988,177 |
| <i>less: Fund assets (actuarial value)</i> | 697,394,739 | 679,933,939 |
| | 396,670,770 | 405,054,238 |
| Funds available to amortize unfunded | | |
| <i>Anticipated contributions (beg. of yr.)</i> | 51,145,607 | 50,911,850 |
| <i>less: Normal cost (including expenses)</i> | 4,498,473 | 4,879,650 |
| | \$ 46,647,134 | \$ 46,032,200 |
| Funding period (years) | 13 | 14 |

CURRENT LIABILITY

Current Liability is determined in a manner similar to the value of accrued benefits, but using an interest rate assumption within an acceptable range determined by the IRS. The current liability is used in the determination of the maximum deductible employer contribution and full funding limit under the Internal Revenue Code. For plans in critical status, it may also be used to determine eligibility for financial assistance under the America Rescue Plan. This alternative measure of liabilities is also a “low default risk” measure. Such a measure could match a lower risk investment strategy, which would provide more benefit security if it can be adequately funded.

| <i>Current Liability as of September 1,</i> | <i>2023</i> | <i>2022</i> |
|--|-------------------------|-------------------------|
| Vested current liability | | |
| <i>Participants currently receiving benefits</i> | \$ 1,059,142,390 | \$ 1,081,185,362 |
| <i>Inactive vested participants</i> | 269,051,128 | 297,505,334 |
| <i>Active participants</i> | 525,463,876 | 594,916,678 |
| | 1,853,657,394 | 1,973,607,374 |
| Nonvested current liability | | |
| <i>Inactive vested participants</i> | 2,251,334 | 2,537,901 |
| <i>Active participants</i> | 33,767,965 | 45,407,040 |
| | 36,019,299 | 47,944,941 |
| Total current liability | \$ 1,889,676,693 | \$ 2,021,552,315 |
| Market value of assets | \$ 656,971,889 | \$ 644,927,452 |
| Current liability funded ratio (Market value) | 34.8% | 31.9% |
| Interest rate used for current liability | 2.51% | 2.00% |

Projection of Current Liability to Year End

| | |
|--|-------------------------|
| Current liability as of September 1, 2023 | \$ 1,889,676,693 |
| Expected increase (decrease) due to: | |
| <i>Benefits accruing</i> | 35,481,604 |
| <i>Benefits paid</i> | (80,943,622) |
| <i>Interest on above</i> | (125,254) |
| <i>Interest on current liability</i> | 47,430,885 |
| Net expected increase (decrease) | 1,843,613 |
| Expected current liability as of August 31, 2024 | \$ 1,891,520,306 |

FUNDING STANDARD ACCOUNT

| <i>Funding Standard Account Plan Year Ending August 31,</i> | <i>2024 (Projected)</i> | <i>2023 (Final)</i> |
|---|-----------------------------|-------------------------|
| Charges | | |
| <i>Prior year funding deficiency</i> | \$ - | \$ - |
| <i>Normal cost (including expenses)</i> | 13,601,396 | 13,957,673 |
| <i>Amortization charges (see Appendix C)</i> | 55,192,101 | 62,063,866 |
| <i>Interest on above</i> | 5,159,511 | 5,701,614 |
| Total charges | 73,953,008 | 81,723,153 |
| Credits | | |
| <i>Prior year credit balance</i> | 51,986,843 | 65,894,803 |
| <i>Employer contributions</i> | 51,765,398 | 55,611,131 |
| <i>Amortization credits (see Appendix C)</i> | 4,815,381 | 4,815,381 |
| <i>Interest on above</i> | 6,201,369 | 7,388,681 |
| <i>ERISA full funding credit</i> | - | - |
| Total credits | 114,768,991 | 133,709,996 |
| Credit balance (credits less charges) | \$ 40,815,983 | \$ 51,986,843 |

FUNDING STANDARD ACCOUNT WITHOUT AMORTIZATION EXTENSION

The Funding Standard Account on the previous page has been developed using an amortization extension approved by the IRS under §412(e) or §431(d) of the Code. We are required to report the dollar difference between the minimum required contribution with extension and without extension on the Schedule MB.

| <i>Funding Standard Account Plan Year Ending August 31,</i> | <i>2024 (Projected)</i> | <i>2023 (Final)</i> |
|--|------------------------------------|--------------------------------|
| Charges | | |
| <i>Prior year funding deficiency</i> | \$ 26,809,151 | \$ 22,808,816 |
| <i>Normal cost (including expenses)</i> | 13,601,396 | 13,957,673 |
| <i>Amortization charges (see Appendix C)</i> | 46,202,232 | 46,658,844 |
| <i>Interest on above</i> | 6,495,959 | 6,256,900 |
| Total charges | 93,108,738 | 89,682,233 |
| Credits | | |
| <i>Prior year credit balance</i> | - | - |
| <i>Employer contributions</i> | 51,765,398 | 55,611,131 |
| <i>Amortization credits (see Appendix C)</i> | 4,815,381 | 4,815,381 |
| <i>Interest on above</i> | 2,302,356 | 2,446,570 |
| <i>ERISA full funding credit</i> | - | - |
| Total credits | 58,883,135 | 62,873,082 |
| Credit balance/(funding deficiency), credits less charges | \$ (34,225,603) | \$ (26,809,151) |

FULL FUNDING LIMIT

| <i>Projection of Assets for Full Funding Limit</i> | <i>Market Value</i> | <i>Actuarial Value</i> |
|--|-------------------------|----------------------------|
| Asset value as of September 1, 2023 | \$ 656,971,889 | \$ 697,394,739 |
| Expected increase (decrease) due to: | | |
| <i>Investment income</i> | 46,186,328 | 49,218,041 |
| <i>Benefits paid</i> | (80,943,622) | (80,943,622) |
| <i>Expenses</i> | (1,364,750) | (1,364,750) |
| Net expected increase (decrease) | (36,122,044) | (33,090,331) |
| Expected value as of August 31, 2024* | \$ 620,849,845 | \$ 664,304,408 |

* Ignoring expected employer contributions (as required by regulation).

| <i>Full Funding Limit as of August 31, 2024</i> | <i>For Minimum Required</i> | <i>For Maximum Deductible</i> |
|---|---------------------------------|-----------------------------------|
| ERISA full funding limit (not less than 0) | | |
| <i>Actuarial liability</i> | \$ 1,027,073,632 | \$ 1,027,073,632 |
| less: <i>Assets (lesser of market or actuarial)</i> | 620,849,845 | 620,849,845 |
| plus: <i>Credit balance (w/interest to year end)</i> | 55,885,856 | n/a |
| | 462,109,643 | 406,223,787 |
| ERISA full funding limit without extension (not less than 0) | | |
| <i>Actuarial liability</i> | 1,027,073,632 | n/a |
| less: <i>Assets (lesser of market or actuarial)</i> | 620,849,845 | n/a |
| plus: <i>Credit bal. w/o ext. (w/int. to year end)</i> | - | n/a |
| | 406,223,787 | n/a |
| Full funding limit override (not less than 0) | | |
| <i>90% of current liability</i> | 1,702,368,275 | 1,702,368,275 |
| less: <i>Assets (actuarial value)</i> | 664,304,408 | 664,304,408 |
| | 1,038,063,867 | 1,038,063,867 |
| Full funding limit (greater of ERISA limit and full funding override) | | |
| <i>With amortization extension</i> | \$ 1,038,063,867 | \$ 1,038,063,867 |
| <i>Without amortization extension</i> | \$ 1,038,063,867 | n/a |

MINIMUM REQUIRED CONTRIBUTION AND FULL FUNDING CREDIT

| <i>Minimum Required Contribution Plan Year Beginning September 1, 2023</i> | <i>Without Extension</i> | <i>With Extension</i> |
|---|-------------------------------------|----------------------------------|
| Minimum funding cost | | |
| <i>Normal cost (including expenses)</i> | \$ 13,601,396 | \$ 13,601,396 |
| <i>Net amortization of unfunded liabilities</i> | 41,386,851 | 50,376,720 |
| <i>Interest to end of plan year</i> | 4,124,119 | 4,798,357 |
| | 59,112,366 | 68,776,473 |
| Full funding limit | 1,038,063,867 | 1,038,063,867 |
| Net charge to funding std. acct. (lesser of above) | 59,112,366 | 68,776,473 |
| less: <i>Credit balance/(funding deficiency) with interest to year end</i> | (28,819,837) | 55,885,856 |
| Minimum Required Contribution (not less than 0) | \$ 87,932,203 | \$ 12,890,617 |
| Effect of extension | | \$ 75,041,586 |

| <i>Full Funding Credit to Funding Standard Account Plan Year Ending August 31, 2024</i> | <i>Without Extension</i> | <i>With Extension</i> |
|--|-------------------------------------|----------------------------------|
| Full funding credit (not less than 0) | | |
| <i>Minimum funding cost (n.c., amort., int.)</i> | \$ 59,112,366 | \$ 68,776,473 |
| less: <i>full funding limit</i> | 1,038,063,867 | 1,038,063,867 |
| | \$ - | \$ - |

MAXIMUM DEDUCTIBLE CONTRIBUTION

The maximum amount of tax-deductible employer contributions made to a pension plan is determined in accordance with Section 404(a) of the Internal Revenue Code. For a multiemployer pension plan, Section 413(b)(7) of the Internal Revenue Code and IRS Announcement 98-1 provide that, if anticipated employer contributions are less than the deductible limit for a plan year, then all employer contributions paid during the year are guaranteed to be deductible. If anticipated employer contributions exceed the deductible limit, the Trustees have two years from the close of the plan year in question to retroactively improve benefits to alleviate the problem.

***Maximum Deductible Contribution
Plan Year Beginning September 1, 2023***

| | | |
|--|----|---------------|
| Preliminary deductible limit | | |
| <i>Normal cost (including expenses)</i> | \$ | 13,601,396 |
| <i>10-year limit adjustment (using "fresh start" alternative)</i> | | 43,889,631 |
| <i>Interest to end of plan year</i> | | 4,311,827 |
| | | 61,802,854 |
| | | |
| Full funding limit | | 1,038,063,867 |
| | | |
| Maximum deductible contribution override | | |
| <i>140% of vested current liability projected to August 31, 2024</i> | | 2,597,652,212 |
| <i>less: Actuarial value of assets projected to August 31, 2024</i> | | 664,304,408 |
| | | 1,933,347,804 |
| | | |
| Maximum deductible contribution* | \$ | 1,933,347,804 |
| | | |
| Anticipated employer contributions | \$ | 51,765,398 |

* Equals the lesser of the preliminary deductible limit and the full funding limit, but not less than the maximum deductible contribution override.

HISTORY OF UNFUNDED VESTED BENEFITS

Presumptive Method

| <i>August 31,</i> | <i>Vested Benefits Interest Rate</i> | <i>Value of Vested Benefits</i> | <i>Asset Value*</i> | <i>Unfunded Vested Benefits</i> | <i>Unamortized Portion of VAB</i> |
|-------------------|--------------------------------------|---------------------------------|---------------------|---------------------------------|-----------------------------------|
| 2004 | 8.00% | 614,835,974 | 545,337,572 | 69,498,402 | |
| 2005 | 8.00% | 625,635,046 | 541,099,517 | 84,535,529 | |
| 2006 | 8.00% | 679,586,027 | 547,823,278 | 131,762,749 | |
| 2007 | 7.50% | 760,397,977 | 568,943,985 | 191,453,992 | |
| 2008 | 7.50% | 791,335,623 | 520,856,466 | 270,479,157 | |
| 2009 | 7.50% | 785,621,334 | 493,003,156 | 292,618,178 | 7,552,238 |
| 2010 | 7.50% | 770,976,557 | 475,169,057 | 295,807,500 | 36,546,438 |
| 2011 | 7.50% | 783,214,375 | 490,293,887 | 292,920,488 | 35,114,418 |
| 2012 | 7.50% | 795,879,170 | 485,449,415 | 310,429,755 | 33,574,997 |
| 2013 | 7.50% | 811,172,970 | 481,874,816 | 329,298,154 | 31,920,119 |
| 2014 | 7.50% | 825,931,742 | 494,366,295 | 331,565,447 | 30,141,126 |
| 2015 | 7.50% | 847,899,117 | 505,653,996 | 342,245,121 | 28,228,708 |
| 2016 | 7.50% | 861,908,964 | 514,965,430 | 346,943,534 | 26,172,859 |
| 2017 | 7.50% | 871,437,581 | 531,018,415 | 340,419,166 | 23,962,821 |
| 2018 | 7.50% | 896,476,088 | 553,276,541 | 343,199,547 | 21,587,029 |
| 2019 | 7.50% | 940,669,202 | 575,450,196 | 365,219,006 | 19,033,055 |
| 2020 | 7.50% | 961,724,247 | 602,422,923 | 359,301,324 | 16,287,531 |
| 2021 | 7.50% | 970,468,873 | 649,942,306 | 320,526,567 | 13,336,093 |
| 2022 | 7.50% | 988,778,820 | 679,933,939 | 308,844,881 | 10,163,299 |
| 2023 | 7.50% | 1,008,960,192 | 697,394,739 | 311,565,453 | 6,752,543 |

* Actuarial Value

TERMINATION BY MASS WITHDRAWAL

If all employers were to cease to have an obligation to contribute to the plan, the plan would be considered “terminated due to mass withdrawal.” In this event, the Trustees would have the option of distributing plan assets in satisfaction of all plan liabilities through the purchase of annuities from insurance carriers or payment of lump sums. If assets are insufficient to cover liabilities, a special actuarial valuation pursuant to Section 4281 of ERISA would be performed as of the end of the plan year in which the mass withdrawal occurred. If the Section 4281 valuation indicates the value of nonforfeitable benefits exceeds the value of plan assets, employer withdrawal liability would be assessed.

The ERISA Section 4281 valuation described above uses required actuarial assumptions that are typically more conservative than those used for valuing an on-going plan. In order to illustrate the impact of the mass withdrawal assumptions, we performed an illustrative Section 4281 valuation as if mass withdrawal had occurred during the prior plan year. The value of assets used below is market value without any adjustments for outstanding employer withdrawal liability claims.

As required by regulation, interest rates of 5.24% for the first 20 years and 4.58% for each year thereafter and the GAM 94 Basic Mortality Table projected to 2033 were used.

***Illustrative Section 4281 Valuation
as of August 31, 2023***

| | | |
|--|-----------|--------------------|
| Value of nonforfeitable benefits | | |
| <i>Participants currently receiving benefits</i> | \$ | 825,065,833 |
| <i>Inactive vested participants</i> | | 180,174,281 |
| <i>Active participants</i> | | 352,483,689 |
| <i>Expenses (per Section 4281 of ERISA)</i> | | 11,978,634 |
| | | 1,369,702,437 |
| <i>less: Fund assets (market value)</i> | | 656,971,889 |
| Value of nonforfeitable benefits in excess of (less than) fund assets | \$ | 712,730,548 |

ASC 960 INFORMATION

The following displays are intended to assist the fund's auditor in complying with Accounting Standards Codification 960. The results shown are not necessarily indicative of the plan's potential liability upon termination.

| <i>Present Value of Accumulated Benefits Actuarial Study as of September 1,</i> | <i>2023</i> | <i>2022</i> |
|---|------------------|------------------|
| Present value of vested accumulated benefits | | |
| <i>Participants currently receiving benefits</i> | \$ 660,123,370 | \$ 640,055,536 |
| <i>Expenses on parts. currently rec. benefits</i> | 11,552,159 | 12,801,111 |
| <i>Other participants</i> | 348,836,822 | 348,723,284 |
| <i>Expenses on other participants</i> | 6,104,644 | 6,974,466 |
| | 1,026,616,995 | 1,008,554,397 |
| Present value of nonvested accumulated benefits | | |
| <i>Nonvested accumulated benefits</i> | 12,291,174 | 14,031,282 |
| <i>Expenses on nonvested benefits</i> | 215,096 | 280,626 |
| | 12,506,270 | 14,311,908 |
| Present value of all accumulated benefits | \$ 1,039,123,265 | \$ 1,022,866,305 |
| Market value of plan assets | \$ 656,971,889 | \$ 644,927,452 |
| Interest rate used to value benefits | 7.50% | 7.50% |

Changes in Present Value of Accumulated Benefits

| | |
|---|------------------|
| Present value of accumulated benefits as of September 1, 2022 | \$ 1,022,866,305 |
| Increase (decrease) due to: | |
| <i>Plan amendment</i> | - |
| <i>Change in actuarial assumptions</i> | 768,956 |
| <i>Benefits accumulated and experience gain or loss</i> | 13,385,327 |
| <i>Interest due to decrease in discount period</i> | 76,714,973 |
| <i>Benefits paid</i> | (73,266,614) |
| <i>Operational expenses paid</i> | (1,345,682) |
| Net increase (decrease) | 16,256,960 |
| Present value of accumulated benefits as of September 1, 2023 | \$ 1,039,123,265 |

APPENDICES

PLAN HISTORY

Origins/Purpose

The Michigan Carpenters’ Council Pension Fund was established in May 1963 to cover the Saginaw Valley and Southwestern Michigan District Councils. Since that time, coverage has been extended to all District Councils, other than the Detroit and Vicinity District Council. Effective January 1, 1982 members working under the jurisdiction of Lathers Local 1028-L began participating in the Michigan Carpenters’ Council Pension Plan prospectively. On October 1, 1994 the Marble-Mosaic-Terrazzo and Tile Workers’ Helpers Pension Plan merged into the Michigan Carpenters’ Pension Fund.

The Pension Plan is managed under the provisions of the Labor Management Relations Act by a Board of Trustees consisting of an equal number of representatives from Labor and from Management.

The purpose of the Pension Plan is to provide Normal and Early Retirement Benefits, Joint and Survivor Benefits, Optional Retirement Benefits, Total and Permanent Disability Benefits, Vested Benefits and Death Benefits.

Employer Contributions

The Pension Plan is financed entirely by contributions from the employers as specified in the applicable Collective Bargaining Agreements. Most of the Carpenters’ agreements follow the below schedule:

| <i>Date</i> | <i>Credited Hourly Contribution Rate</i> | <i>Non-Credited Hourly Contribution Rate</i> | <i>Total Hourly Contribution Rate</i> |
|-------------|--|--|---------------------------------------|
| 8-1-05 | \$ 3.00 | \$ 0.10 | \$ 3.10 |
| 6-1-06 | 3.00 | 0.20 | 3.20 |
| 6-1-07 | 3.00 | 1.00 | 4.00 |
| 6-1-08 | 3.00 | 2.00 | 5.00 |
| 6-1-09 | 4.45 | 2.00 | 6.45 |
| 6-1-10 | 5.90 | 2.00 | 7.90 |
| 6-1-11 | 7.35 | 2.00 | 9.35 |
| 7-1-12 | 8.80 | 2.00 | 10.80 |
| 6-1-13 | 8.80 | 2.50 | 11.30 |
| 6-1-14 | 8.80 | 3.00 | 11.80 |
| 6-1-15 | 9.28 | 3.00 | 12.28 |
| 9-1-16 | 9.52 | 3.24 | 12.76 |
| 6-1-17 | 9.76 | 3.48 | 13.24 |

The “credited” contributions are counted towards benefits in eligible years. Contributions that are “non-credited” are not counted when determining pension benefits.

PLAN HISTORY (CONT.)

Reciprocity

The Fund is a party to the agreement operative among pension plans covering Carpenters, Millwrights and Millmen which are in the jurisdiction of the Third District of the United Brotherhood of Carpenters and Joiners of America, AFL-CIO, International Pro-Rata Pension Reciprocity Agreement sponsored by the United Brotherhood of Carpenters and Joiners of America, AFL-CIO and other “money follows the man” reciprocity agreements.

Tax Exempt Status

The Trust Agreement and the Pension Plan were initially filed with and approved by the District Director, Internal Revenue Service, as qualified and exempt from taxation. It is the intention of the Trustees to maintain the Trust Agreement and Pension Plan as qualified and exempt from taxation under the appropriate provisions of the Internal Revenue Code and the Rules and Regulations issued thereunder, as amended from time to time.

SUMMARY OF PLAN PROVISIONS

| | |
|---|--|
| Plan year | The 12-month period beginning September 1 and ending the following August 31. |
| Years of service for eligibility and benefit determination | Effective September 1, 1976, plan year with at least 500 service hours (435 hours worked). Effective September 1, 2007, plan year with at least 575 service hours (500 hours worked). |
| Years of vesting service | One vesting year for each Year of Service plus additional service as granted through special circumstances. |
| Break in service plan year | Plan year with less than 500 service hours (435 hours worked). |
| Normal retirement benefit | |
| <i>Eligibility</i> | Age 65 or 5 th anniversary of date of participation, if later. |
| <i>Monthly amount</i> | <ul style="list-style-type: none"> • Accrued benefit as of August 31, 1997; plus • 4.3% of contributions made from September 1, 1997 through August 31, 2003; plus • 1.0% of contributions made on or after September 1, 2003 through July 31, 2005; plus • 1.0% of credited contributions made on or after August 1, 2005 through August 31, 2007; plus • 1.0% of credited contributions made for each plan year with at least 575 service hours (500 hours worked), on or after September 1, 2007. <p>Payable for life.</p> <p>For service before September 1, 1997, active participants were granted a 12% increase in their accrued benefits.</p> |
| Index 90 and 58 early retirement benefit | |
| <i>Eligibility</i> | Active participant; combined age and service equals 90 and at least age 58. |
| <i>Monthly amount</i> | Normal. Payable for life. |

SUMMARY OF PLAN PROVISIONS (CONT.)

| | |
|---|---|
| Early retirement benefit | |
| <i>Eligibility</i> | Age 58 with 10 years of service. |
| <i>Monthly amount</i> | Normal. Reduced by 5/9th of 1% for each month under age 65. Payable for life. |
| Optional forms of payment | <ul style="list-style-type: none"> • 50% qualified joint and survivor. • 75% joint and survivor. • 100% joint and survivor. • Life – Ten years certain. |
| Total and permanent disability benefit | |
| <i>Eligibility</i> | Under age 65 with 10 years of service. Disabled while active. |
| <i>Monthly amount</i> | <p>Disabled participants with at least 10 years of service and one year of service in the 4 plan years preceding disability and a disability award from Social Security receive the lesser of \$375 or accrued benefit. Payable until the earliest of age 65, recovery or death. Normal at age 65.</p> <p>Those without a disability award from Social Security receive the lesser of \$750 or accrued benefit. Payable until Social Security disability begins or 5-year period, whichever is earlier.</p> |
| Vested benefit | |
| <i>Eligibility</i> | Terminated, 5 years of service. |
| <i>Monthly amount</i> | 100% of normal (based on benefit formula in effect at time participant became inactive) commencing at age 65. Payable for life. |
| Pre-retirement deferred surviving spouse benefit | |
| <i>Eligibility</i> | Death of vested participant with eligible spouse. |
| <i>Monthly or single sum amount</i> | 50% of participant’s joint and 50% survivor. Payable to spouse for life commencing when participant would have reached earliest retirement age. |

HISTORICAL PLAN MODIFICATIONS

| | |
|---|---|
| Vesting schedule | |
| <i>Effective date</i> | September 1, 1997 |
| <i>Adoption date</i> | March 18, 1997 |
| <i>Provisions</i> | The vested benefit schedule modified from 5-10 year graded vesting to 100% at 5 years. |
| Lump sum distributions | |
| <i>Effective date</i> | September 1, 1997 |
| <i>Adoption date</i> | March 18, 1997 |
| <i>Provisions</i> | The amount of unilateral lump sum distributions increased from \$3,500 to \$5,000. |
| Active participant benefit increase | |
| <i>Effective date</i> | September 1, 1997 |
| <i>Adoption date</i> | March 24, 1998 |
| <i>Provisions</i> | For active participants, benefits accrued through September 1, 1997 increased by 12%. |
| Retiree benefit increase | |
| <i>Effective date</i> | September 1, 1997 |
| <i>Adoption date</i> | March 24, 1998 |
| <i>Provisions</i> | All retirees and beneficiaries receiving benefits as of September 1, 1997 received an additional 5% increase. |
| Pre-retirement joint and survivor benefit increase | |
| <i>Effective date</i> | September 1, 1997 |
| <i>Adoption date</i> | March 24, 1998 |
| <i>Provisions</i> | The pre-retirement joint and survivor benefit increased from joint and 50% survivor to joint and 100% survivor. |

HISTORICAL PLAN MODIFICATIONS (CONT.)

| | |
|------------------------------------|---|
| Disability benefit increase | |
| <i>Effective date</i> | September 1, 1997 |
| <i>Adoption date</i> | March 24, 1998 |
| <i>Provisions</i> | The monthly disability benefit increased from \$250 to \$375 for those receiving a disability award from Social Security and from \$500 to \$750 for those without the disability award. |
| Vesting years | |
| <i>Effective date</i> | September 1, 1998 |
| <i>Adoption date</i> | September 27, 1999 |
| <i>Provisions</i> | One vesting year granted for each plan year the active participant performs 1 hour of work. 435 hours is still required in order to earn a year of service for other purposes such as retirement eligibility. |
| Joint and survivor option | |
| <i>Effective date</i> | September 1, 2001 |
| <i>Adoption date</i> | June 21, 2001 |
| <i>Provisions</i> | A joint and 75% survivor annuity optional form was added. The new benefit is the actuarial equivalent of the single life annuity. |
| Lump sum death benefit | |
| <i>Effective date</i> | September 1, 2000 |
| <i>Adoption date</i> | December 14, 2001 |
| <i>Provisions</i> | The pre-retirement lump sum death benefit for unmarried participants was increased to pay 100% of contributions at 15 years of service. |

HISTORICAL PLAN MODIFICATIONS (CONT.)

| | |
|-----------------------------------|---|
| Crediting rate decrease | |
| <i>Effective date</i> | September 1, 2003 |
| <i>Adoption date</i> | June 17, 2003 |
| <i>Provisions</i> | The crediting rate for employer contributions for work performed on and after September 1, 2003 was decreased from 4.30% to 1.00%. Contributions for work performed prior to September 1, 2003 are still credited at 4.30%. |
| Crediting rate increase | |
| <i>Effective date</i> | September 1, 2003 – (RESCINDED March 1, 2009) |
| <i>Adoption date</i> | February 9, 2005 |
| <i>Provisions</i> | The crediting rate for employer contributions for work performed from September 1, 2003 through August 31, 2004 was increased from 1.00% to 3.00%. Contributions for work performed on and after September 1, 2004 are still credited at 1.00%. |
| Non-credited contributions | |
| <i>Effective date</i> | August 1, 2005 |
| <i>Approval date</i> | May 11, 2005 |
| <i>Provisions</i> | Effective August 1, 2005, 10¢ per hour is <u>non-credited</u> with respect to benefit accruals. The non-credited amount increases by 10¢ each year until it reaches 50¢ per hour. |
| Crediting rate increase | |
| <i>Effective date</i> | September 1, 2004 – (RESCINDED March 1, 2009) |
| <i>Adoption date</i> | February 8, 2006 |
| <i>Provisions</i> | The crediting rate for employer contributions for work performed from September 1, 2004 through August 31, 2005 was increased from 1.00% to 3.00%. Contributions for work performed on and after September 1, 2005 are still credited at 1.00%. |

HISTORICAL PLAN MODIFICATIONS (CONT.)

| | |
|--|--|
| Index 80 & Index 85/58 early retirement benefit | |
| <i>Effective date</i> | September 1, 2007 |
| <i>Adoption date</i> | July 10, 2007 |
| <i>Provisions</i> | For participants who worked before September 1, 2007, the Index 80 benefit stays in effect. For participants who first worked on or after September 1, 2007, the Index 80 benefit eligibility is replaced by the Index 85 and age 58 benefit eligibility. |
| Non-credited contributions | |
| <i>Effective date</i> | June 1, 2007 |
| <i>Approval date</i> | July 10, 2007 |
| <i>Provisions</i> | Effective June 1, 2007, \$1.00 per hour is <u>non-credited</u> with respect to benefit accruals. |
| Future service benefit credit | |
| <i>Effective date</i> | September 1, 2007 |
| <i>Adoption date</i> | July 10, 2007 |
| <i>Provisions</i> | For plan years beginning on or after September 1, 2007, no future service benefit credit will be given for employer contributions during a plan year in which fewer than 500 hours of work (575 hours of service) are performed. |
| Non-credited contributions | |
| <i>Effective date</i> | June 1, 2008 |
| <i>Approval date</i> | December 19, 2007 |
| <i>Provisions</i> | Effective June 1, 2008, \$2.00 per hour is <u>non-credited</u> with respect to benefit accruals. |

HISTORICAL PLAN MODIFICATIONS (CONT.)

| | |
|--|--|
| Crediting rate decrease | |
| <i>Effective date</i> | March 1, 2009 - rescinded September 1, 2003 and September 1, 2004 increase |
| <i>Adoption date</i> | December 17, 2008 |
| <i>Provisions</i> | For participants currently active or in pay status, the crediting rate for employer contributions for work performed from September 1, 2003 through August 31, 2005 was changed from 3.00% to 1.00%. |
| Pre-retirement deferred surviving spouse benefit | |
| <i>Effective date</i> | March 1, 2009 |
| <i>Adoption date</i> | December 17, 2008 |
| <i>Provisions</i> | The 100% of participant’s joint and 100% survivor pre-retirement deferred death benefit is changed to 50% of participant’s joint and 50% survivor. |
| Lump sum death benefit eliminated | |
| <i>Effective date</i> | March 1, 2009 |
| <i>Adoption date</i> | December 17, 2008 |
| <i>Provisions</i> | The pre-retirement lump sum death benefit has been eliminated. |
| Index 80 & Index 90/58 early retirement benefit | |
| <i>Effective date</i> | September 1, 2009 |
| <i>Adoption date</i> | June 6, 2009 |
| <i>Provisions</i> | For participants who had 78 points on or before September 1, 2009, the Index 80 benefit stays in effect. For all other participants, it is replaced by the Index 90 and age 58 benefit eligibility. |

HISTORICAL PLAN MODIFICATIONS (CONT.)

| | |
|--|--|
| Early retirement benefit | |
| <i>Effective date</i> | September 1, 2009 |
| <i>Adoption date</i> | June 6, 2009 |
| <i>Provisions</i> | The early retirement reduction that is measured from age 60 applies only if the participant is at least age 58 and has 25 or more years of service on or before September 1, 2009. |
| Lump sum disability benefit | |
| <i>Effective date</i> | February 1, 2011 |
| <i>Adoption date</i> | December 21, 2010 |
| <i>Provisions</i> | Lump sum disability option previously payable to disabled participants with 5-9 years of service is no longer available. |
| Reciprocity of non-credited contributions | |
| <i>Effective date</i> | November 1, 2012 |
| <i>Approval date</i> | September 19, 2012 |
| <i>Provisions</i> | Detroit-Michigan reciprocity agreement requires only the transfer of credited employer contributions. |
| Non-credited contribution increases | |
| <i>Effective date</i> | June 1, 2013 & June 1, 2014 |
| <i>Approval date</i> | November 20, 2012 |
| <i>Provisions</i> | Effective June 1, 2013, \$2.50 per hour is <u>non-credited</u> with respect to benefit accruals. The total hourly contribution rate is also increased 50¢, effective June 1, 2013. Effective June 1, 2014, \$3.00 per hour is <u>non-credited</u> with respect to benefit accruals. The total hourly contribution rate is also increased 50¢, effective June 1, 2014. |

HISTORICAL PLAN MODIFICATIONS (CONT.)

| | |
|---|--|
| Reciprocity of non-credited contributions | |
| <i>Effective date</i> | November 1, 2015 |
| <i>Approval date</i> | August 12, 2015 |
| <i>Provisions</i> | The Detroit-Michigan reciprocity agreement that requires only the transfer of credited employer contributions has been terminated effective November 1, 2015. This means that reciprocity will default back to the international agreement, to which both funds are a party. Reciprocity will generally be “money follows the man” starting in November. |
| Credited contribution increases | |
| <i>Effective date</i> | June 1, 2015 |
| <i>Approval date</i> | December 10, 2014 |
| <i>Provisions</i> | Effective June 1, 2015, the total hourly contribution rate is increased 48¢. All of the 48¢ increase is credited for benefit accruals. The <u>non-credited</u> rate remains \$3.00. |
| Nuclear power plants | |
| <i>Effective date</i> | January 1, 2016 |
| <i>Approval date</i> | December 15, 2015 |
| <i>Provisions</i> | \$3.28 is moved from the hourly pension contribution rate to the wage rate on Carpenter and Millwright hours worked at nuclear power plants which have a total power generating capability of 500 megawatts or more in the jurisdiction of Local Union 525. |
| Credited and non-credited contribution increases | |
| <i>Effective date</i> | September 1, 2016 |
| <i>Approval date</i> | April 27, 2016 |
| <i>Provisions</i> | Effective September 1, 2016, the total hourly contribution rate is increased 48¢. 24¢ of this increase is credited for benefit accruals and 24¢ is non-credited, bringing the <u>non-credited</u> rate up to \$3.24. |

HISTORICAL PLAN MODIFICATIONS (CONT.)

Credited and non-credited contribution increases

Effective date

June 1, 2017

Provisions

Effective June 1, 2017, the total hourly contribution rate is increased 48¢. 24¢ of this increase is credited for benefit accruals and 24¢ is non-credited, bringing the non-credited rate up to \$3.48.

ACTUARIAL ASSUMPTIONS

| Valuation date | September 1, 2023 | | | | | | | | | | | | | | | | | | |
|---|---|------------|------------------------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|----|-------|
| Interest rates | | | | | | | | | | | | | | | | | | | |
| <i>ERISA rate of return used to value liabilities</i> | 7.50% per year net of investment expenses | | | | | | | | | | | | | | | | | | |
| <i>Unfunded vested benefits</i> | 7.50% per year net of investment expenses | | | | | | | | | | | | | | | | | | |
| <i>Current liability</i> | 2.51% (in accordance with Section 431(c)(6) of the Internal Revenue Code) | | | | | | | | | | | | | | | | | | |
| Operational expenses | | | | | | | | | | | | | | | | | | | |
| <i>Funding</i> | \$1,364,750 for the 2023-24 plan year excluding investment expenses, increasing 3.0% per year. | | | | | | | | | | | | | | | | | | |
| <i>ASC 960</i> | A 1.75% load was applied to the accrued liabilities for 2023 (2.00% for 2022). | | | | | | | | | | | | | | | | | | |
| Mortality | | | | | | | | | | | | | | | | | | | |
| <i>Assumed plan mortality</i> | 110% of the PRI-2012 Blue Collar Mortality Tables for employees and healthy annuitants projected forward using the MP-2021 projection scale. | | | | | | | | | | | | | | | | | | |
| <i>Current liability</i> | Separate annuitant and non-annuitant rates based on the RP-2000 Mortality Tables Report developed for males and females as prescribed by Section 431(c)(6) of the Internal Revenue Code. | | | | | | | | | | | | | | | | | | |
| Disability | 40% of the 1964 OASDI male table - specimen rates shown below: | | | | | | | | | | | | | | | | | | |
| | <table border="0" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;"><u>Age</u></th> <th style="text-align: center;"><u>Disability Rate</u></th> </tr> </thead> <tbody> <tr><td style="text-align: center;">25</td><td style="text-align: center;">.0003</td></tr> <tr><td style="text-align: center;">30</td><td style="text-align: center;">.0004</td></tr> <tr><td style="text-align: center;">35</td><td style="text-align: center;">.0006</td></tr> <tr><td style="text-align: center;">40</td><td style="text-align: center;">.0009</td></tr> <tr><td style="text-align: center;">45</td><td style="text-align: center;">.0014</td></tr> <tr><td style="text-align: center;">50</td><td style="text-align: center;">.0024</td></tr> <tr><td style="text-align: center;">55</td><td style="text-align: center;">.0040</td></tr> <tr><td style="text-align: center;">60</td><td style="text-align: center;">.0065</td></tr> </tbody> </table> | <u>Age</u> | <u>Disability Rate</u> | 25 | .0003 | 30 | .0004 | 35 | .0006 | 40 | .0009 | 45 | .0014 | 50 | .0024 | 55 | .0040 | 60 | .0065 |
| <u>Age</u> | <u>Disability Rate</u> | | | | | | | | | | | | | | | | | | |
| 25 | .0003 | | | | | | | | | | | | | | | | | | |
| 30 | .0004 | | | | | | | | | | | | | | | | | | |
| 35 | .0006 | | | | | | | | | | | | | | | | | | |
| 40 | .0009 | | | | | | | | | | | | | | | | | | |
| 45 | .0014 | | | | | | | | | | | | | | | | | | |
| 50 | .0024 | | | | | | | | | | | | | | | | | | |
| 55 | .0040 | | | | | | | | | | | | | | | | | | |
| 60 | .0065 | | | | | | | | | | | | | | | | | | |

ACTUARIAL ASSUMPTIONS (CONT.)

Withdrawal

T-7 Turnover Table from The Actuary’s Pension Handbook (less GAM 51 mortality and OASDI 64 disability rates) – specimen rates shown below. Assumed rate during second year of employment is 50%*, 35% for the third year, and 15% for the fourth year.

| <u>Age</u> | <u>Withdrawal Rate</u> |
|------------|------------------------|
| 25 | .0967 |
| 30 | .0930 |
| 35 | .0871 |
| 40 | .0775 |
| 45 | .0635 |
| 50 | .0422 |
| 55 | .0155 |
| 60 | .0015 |

No withdrawal assumed after participant reaches early retirement age.

* All newly reported participants are considered to have already worked their first year of employment.

Retirement
Active lives

According to the following schedule:

| <u>Age</u> | <u>Ineligible for Index 90/58</u> | <u>Eligible for Index 90/58*</u> |
|------------|-----------------------------------|----------------------------------|
| 58 | .05 | .75 |
| 59 | .05 | .60 |
| 60 | .10 | .35 |
| 61 | .15 | .50 |
| 62 | .15 | .60 |
| 63 | .20 | .40 |
| 64 | .30 | .40 |
| 65+ | 1.00 | 1.00 |

* Eligibility during the upcoming year.
Minimum of 0.50 in first year eligible for Index 90/58.

Resulting in an average expected retirement age of 60.6.

Inactive vested lives

Earliest eligible retirement age.

ACTUARIAL ASSUMPTIONS (CONT.)

| | |
|--|--|
| <i>Disabled lives</i> | Disability benefit assumed payable until the earliest of age 60 or age eligible for Index 90/58 (or current age if older), then normal retirement benefit commences. Future disabled participants assumed to receive \$750 per month for the first 5 years of disability, \$375 per month thereafter |
| Timing of decrements | Middle of year |
| Future hours worked | 1,650 hours per year, 0 after assumed retirement age. |
| <i>Vested lives</i> | 800 hours per year, 0 after assumed retirement age. |
| <i>Non-vested lives</i> | |
| Future contribution rate | Credited hourly contribution rate is set equal to: |
| <i>Credited rate</i> | <ul style="list-style-type: none"> • Individual’s average hourly credited contribution rate for the most recent plan year adjusted for any negotiated increases |
| <i>Total rate</i> | Total hourly contribution rate is set equal to: <ul style="list-style-type: none"> • Individual’s expected credited rate (above); <i>plus</i> • Individual’s average hourly non-credited contribution rate for the most recent plan year adjusted for any negotiated increases |
| Age of participants with unrecorded birth dates | Based on average entry age of participants with recorded birth dates and same vesting status. |
| Marriage assumptions | 100% assumed married with the male spouse 3 years older than his wife. |
| Optional form assumption | All non-retired participants assumed to elect the life only form of benefit. |

ACTUARIAL ASSUMPTIONS (CONT.)

| | |
|---|---|
| Inactive vested lives over age 74 | Continuing inactive vested participants age nearest 74 and older are assumed deceased and are not valued. Participants assumed deceased under age 74 prior to September 1, 2020 are still assumed to be deceased. |
| QDRO benefits | Benefits to alternate payee included with participant’s benefit until payment commences. |
| Section 415 limit assumptions <i>Dollar limit</i> | \$265,000 per year. |
| <i>Assumed form of payment for those limited by Section 415</i> | Joint and 100% survivor annuity. |
| Benefits not valued | None |
| Benefits Vested | No death benefits are vested. Disability benefits are considered vested only in relation to corresponding retirement benefit. Early retirement subsidies are considered vested when participant reaches age 58 and has 10 years of vesting service. |

RATIONALE FOR SELECTION OF ACTUARIAL ASSUMPTIONS

The non-prescribed actuarial assumptions were selected to provide a reasonable long term estimate of developing experience. The assumptions are reviewed annually, including a comparison to actual experience. The following describes our rationale for the selection of each non-prescribed assumption that has a significant effect on the valuation results.

| | |
|---|--|
| ERISA rate of return used to value liabilities | <p>Future rates of return were modeled based on the Plan’s current investment policy asset allocation and composite, long-term capital market assumptions taken from Horizon Actuarial’s 2023 survey of investment consultants.</p> <p>Based on this analysis, we selected a final assumed rate of 7.50%, which we feel is reasonable. This rate may not be appropriate for other purposes such as settlement of liabilities.</p> <p>Due to the special rules related to withdrawal liability for a construction industry plan and the nature of the building trades industry, we believe the valuation interest rate is also appropriate for withdrawal liability purposes.</p> |
| Mortality | <p>The PRI-2012 Blue Collar Mortality Tables for employees and healthy annuitants projected forward using the MP-2021 projection scale was chosen as the base table for this population. The blue collar table was chosen based on the industry of plan participants.</p> <p>Finally, a 110% multiplier for males and females was applied in order to more closely match projected deaths to actual post-retirement death experience. The period of actual data studied to develop this multiplier was from September 1, 2018 to August 31, 2023. Based on information from the CDC on COVID-19 deaths through June 7, 2023, this study was adjusted to reflect an ongoing expectation of slightly higher deaths due to COVID-19 by 1) including an increase in deaths due to COVID-19 for the study period prior to March 15, 2020 and 2) excluding the high increase in deaths due to COVID-19 for the study period March 15, 2020 to March 15, 2022..</p> |
| Retirement | <p>Actual rates of retirement by age were last studied for this plan for the period September 1, 2018 to August 31, 2023. The assumed future rates of retirement were selected based on the results of this study.</p> |

RATIONALE FOR SELECTION OF ACTUARIAL ASSUMPTIONS (CONT.)

| | |
|----------------------------|---|
| Withdrawal | Actual rates of withdrawal by age were last studied for this plan for the period September 1, 2018 to August 31, 2023. The assumed future rates of withdrawal were selected based on the results of this study. |
| Future hours worked | Based on review of recent plan experience. |

ACTUARIAL ASSUMPTIONS USED FOR PROJECTIONS

The assumptions used for the credit balance, funded ratio and PPA zone projections are the same as used throughout the report with the following exceptions.

| | |
|--------------------------------------|---|
| Assumed return on fund assets | |
| <i>Current year projections</i> | 7.50% for all years. |
| <i>Prior year projections</i> | 6.50% for the first 10 years (9/1/2022-8/31/2032)* 7.50% thereafter |
| | * For PPA certification projections, the 6.50% short-term assumption is used for years prior to the certification date only; the 7.50% long-term assumption is used for all years following the certification date. |
| Expenses | |
| <i>Current year projections</i> | \$1,364,750 in the 2023-24 plan year excluding investment expenses, increasing 3.0% each year thereafter. Additional increases are reflected in plan years beginning 2024 and 2031 to account for the scheduled PBGC premium rate increases to \$37 and \$52 per participant. |
| <i>Prior year projections</i> | \$1,325,000 in the 2022-23 plan year excluding investment expenses increasing 3.0% each year thereafter. Additional increases are reflected in plan years beginning 2023 and 2031 to account for the scheduled PBGC premium rate increases to \$35 and \$52 per participant. |
| Future total hours worked | |
| <i>Current year projections</i> | 3,850,000 for all years |
| <i>Prior year projections</i> | 3,950,000 for all years |
| | The total hours above are a further pro-rata adjustment to future hours assumption by participant. |
| Contribution rate increases | |
| <i>Current year projections</i> | None |
| <i>Prior year projections</i> | None |
| Changes since prior year | None |

ACTUARIAL ASSUMPTIONS USED FOR PROJECTIONS (CONT.)

Open group projections

Current year projections

Stable population assumed with new entrants and returning participants replacing active participants as they withdraw, retire, or die. Assumed new entrants are based upon entry age of new entrants and reentry age of returning participants over the last 5 years. Entry ages are calculated using reported dates of birth only.

Prior year projections

Projected normal costs are adjusted using the open group percentage increases from the 2021 valuation. Projected benefit payment amounts are adjusted using the new entrant payments from the 2021 valuation pro-rated for the change in new entrants required to replace exiting actives in the current valuation.

Stochastic modeling

1000 trials. Future returns are modeled using an expected return of 8.27% for the first 10 years and 8.58% thereafter and a standard deviation of 12.61%, which is representative of the plan’s investment portfolio. The preceding expected returns are one-year values which are not representative of longer-term geometric average returns as considered when setting the ERISA return assumption.

ACTUARIAL METHODS

| | |
|---|--|
| <p>Funding method <i>ERISA Funding</i></p> | Traditional unit credit cost method, effective September 1, 2003. |
| <p><i>Funding period</i></p> | Individual entry age normal with costs spread as a level dollar amount over service |
| <p>Population valued <i>Actives</i></p> | Eligible employees with at least one hour during the preceding plan year. |
| <p><i>Inactive vested</i></p> | Vested participants with no hours during the preceding plan year. |
| <p><i>Retirees</i></p> | Participants and beneficiaries in pay status as of the valuation date. |
| <p>Asset valuation method <i>Actuarial value</i></p> | Smoothed market value with phase-in effective September 1, 2008. Gains and losses are spread over a 5-year period. The actuarial value is limited to not less than 80% and not more than 120% of the actual market value of assets in any plan year. |
| <p><i>Unfunded vested benefits</i></p> | For the presumptive method, actuarial value, as described above, is used. |
| <p>Amortization extension <i>Effective dates</i></p> | September 1, 2008 (first extension) September 1, 2019 (second extension) |
| <p><i>Length of extension</i></p> | 5 years for both extensions |
| <p><i>Applicable amortization bases extended</i></p> | All funding standard account amortization charge bases with an outstanding balance on each effective date unless such charge base was for a method change, already extended under the Pension Relief Act of 2010, or already had the 5-year extension applied. |

Appendix C - Minimum Funding Amortization Bases
Michigan Carpenters Pension Plan
September 1, 2023 Actuarial Valuation
Bases Shown: With Extension

| Date Established | Source of Change in Unfunded Liability | Original Amount | Original Period | Remaining Period | | 9/1/2023 Outstanding Balance | 9/1/2023 Amortization Payment |
|------------------|--|-----------------|-----------------|------------------|--------|------------------------------|-------------------------------|
| | | | | Years | Months | | |
| Charges | | | | | | | |
| 9/1/1979 | Amendment | | 45 | 1 | 0 | 233,171 | 233,171 |
| 9/1/1980 | Amendment | | 45 | 2 | 0 | 869,882 | 450,665 |
| 9/1/1989 | Amendment | | 35 | 1 | 0 | 1,045,699 | 1,045,699 |
| 9/1/1990 | Assumptions | | 35 | 2 | 0 | 836,857 | 433,551 |
| 9/1/1993 | Assumptions | | 35 | 5 | 0 | 1,369,809 | 314,947 |
| 9/1/1994 | Amendment | | 35 | 6 | 0 | 2,528,360 | 501,072 |
| 9/1/1994 | Assumptions | | 35 | 6 | 0 | 485,846 | 96,289 |
| 9/1/1995 | Assumptions | 23,693,931 | 35 | 7 | 0 | 9,547,650 | 1,676,838 |
| 9/1/1997 | Amendment | 39,574,309 | 35 | 9 | 0 | 19,582,540 | 2,855,719 |
| 9/1/1997 | Assumptions | 14,174,319 | 35 | 9 | 0 | 7,013,876 | 1,022,833 |
| 9/1/2002 | Amendment | 28,326,474 | 35 | 14 | 0 | 19,208,042 | 2,104,797 |
| 9/1/2003 | Assumptions | 20,435,609 | 35 | 15 | 0 | 14,468,083 | 1,524,700 |
| 9/1/2004 | Experience | 30,580,654 | 20 | 1 | 0 | 2,591,073 | 2,591,073 |
| 9/1/2005 | Amendment | 12,867,110 | 35 | 17 | 0 | 9,804,023 | 966,722 |
| 9/1/2005 | Experience | 27,327,749 | 20 | 2 | 0 | 4,571,999 | 2,368,625 |
| 9/1/2006 | Amendment | 12,243,623 | 35 | 18 | 0 | 9,626,431 | 922,605 |
| 9/1/2006 | Assumptions | 32,519,474 | 35 | 18 | 0 | 25,568,096 | 2,450,470 |
| 9/1/2006 | Experience | 21,799,795 | 20 | 3 | 0 | 5,384,918 | 1,926,240 |
| 9/1/2007 | Assumptions | 43,584,357 | 35 | 19 | 0 | 35,254,960 | 3,293,008 |
| 9/1/2007 | Experience | 18,130,929 | 20 | 4 | 0 | 5,864,118 | 1,628,688 |
| 9/1/2008 | Experience | 20,337,861 | 20 | 5 | 0 | 8,071,491 | 1,855,800 |
| 9/1/2009 | Assumptions | 2,841,020 | 20 | 6 | 0 | 890,455 | 176,472 |
| 9/1/2009 | Experience | 5,073,753 | 20 | 6 | 0 | 1,590,264 | 315,160 |
| 9/1/2009 | Relief 08 Asset Loss | 34,760,076 | 29 | 15 | 0 | 26,233,516 | 2,764,577 |
| 9/1/2010 | Experience | 6,936,306 | 20 | 7 | 0 | 2,670,520 | 469,019 |
| 9/1/2010 | Relief 08 Asset Loss | 19,337,414 | 28 | 15 | 0 | 14,748,821 | 1,554,282 |
| 9/1/2011 | Relief 08 Asset Loss | 10,134,263 | 27 | 15 | 0 | 7,818,673 | 823,958 |
| 9/1/2012 | Relief 08 Asset Loss | 21,827,033 | 26 | 15 | 0 | 17,051,204 | 1,796,915 |
| 9/1/2013 | Relief 08 Asset Loss | 22,587,104 | 25 | 15 | 0 | 17,886,435 | 1,884,934 |
| 9/1/2014 | Relief 08 Asset Loss | 19,238,145 | 24 | 15 | 0 | 15,461,886 | 1,629,428 |
| 9/1/2015 | Assumptions | 6,918,506 | 20 | 12 | 0 | 4,851,667 | 583,454 |
| 9/1/2015 | Experience | 11,107,701 | 20 | 12 | 0 | 7,789,377 | 936,739 |
| 9/1/2016 | Experience | 20,386,733 | 20 | 13 | 0 | 15,387,882 | 1,761,579 |
| 9/1/2017 | Experience | 18,943,784 | 20 | 14 | 0 | 15,252,453 | 1,671,348 |
| 9/1/2018 | Assumptions | 5,919,635 | 20 | 15 | 0 | 5,045,919 | 531,756 |

Appendix C - Minimum Funding Amortization Bases
Michigan Carpenters Pension Plan
September 1, 2023 Actuarial Valuation
Bases Shown: With Extension

| Date Established | Source of Change in Unfunded Liability | Original Amount | Original Period | Remaining Period | | 9/1/2023 Outstanding Balance | 9/1/2023 Amortization Payment |
|--------------------------------------|--|-----------------|-----------------|------------------|--------|------------------------------|-------------------------------|
| | | | | Years | Months | | |
| 9/1/2018 | Experience | 14,681,216 | 20 | 15 | 0 | 12,514,318 | 1,318,803 |
| 9/1/2019 | Assumptions | 19,014,723 | 20 | 16 | 0 | 17,050,700 | 1,735,066 |
| 9/1/2019 | Experience | 21,934,667 | 20 | 16 | 0 | 19,669,043 | 2,001,507 |
| 9/1/2020 | Assumptions | 3,585,595 | 15 | 12 | 0 | 3,142,087 | 377,862 |
| 9/1/2021 | Assumptions | 1,212,360 | 15 | 13 | 0 | 1,116,043 | 127,763 |
| 9/1/2022 | Experience | 3,962,118 | 15 | 14 | 0 | 3,810,419 | 417,542 |
| 9/1/2023 | Assumptions | 3,256,945 | 15 | 15 | 0 | 3,256,945 | 343,228 |
| 9/1/2023 | Experience | 16,199,851 | 15 | 15 | 0 | 16,199,851 | 1,707,197 |
| Total Charges: | | | | | | 413,365,402 | 55,192,101 |
| Credits | | | | | | | |
| 9/1/2016 | Assumptions | 6,865,210 | 15 | 8 | 0 | 4,555,462 | 723,480 |
| 9/1/2017 | Assumptions | 13,752,769 | 15 | 9 | 0 | 9,938,384 | 1,449,315 |
| 9/1/2020 | Experience | 1,257,599 | 15 | 12 | 0 | 1,102,045 | 132,530 |
| 9/1/2021 | Experience | 23,818,310 | 15 | 13 | 0 | 21,926,041 | 2,510,056 |
| Total Credits: | | | | | | 37,521,932 | 4,815,381 |
| Net Charges: | | | | | | 375,843,470 | 50,376,720 |
| Less Credit Balance: | | | | | | 51,986,843 | |
| Less Reconciliation Balance: | | | | | | 0 | |
| Unfunded Actuarial Liability: | | | | | | 323,856,627 | |

Appendix C - Minimum Funding Amortization Bases
Michigan Carpenters Pension Plan
September 1, 2023 Actuarial Valuation
Bases Shown: Without Extension

| Date Established | Source of Change in Unfunded Liability | Original Amount | Original Period | Remaining Period | | 9/1/2023 Outstanding Balance | 9/1/2023 Amortization Payment |
|------------------|--|-----------------|-----------------|------------------|--------|------------------------------|-------------------------------|
| | | | | Years | Months | | |
| Charges | | | | | | | |
| 9/1/1994 | Amendment | | 30 | 1 | 0 | 570,814 | 570,814 |
| 9/1/1994 | Assumptions | | 30 | 1 | 0 | 109,667 | 109,667 |
| 9/1/1995 | Assumptions | 23,693,931 | 30 | 2 | 0 | 3,642,653 | 1,887,151 |
| 9/1/1997 | Amendment | 39,574,309 | 30 | 4 | 0 | 11,339,171 | 3,149,315 |
| 9/1/1997 | Assumptions | 14,174,319 | 30 | 4 | 0 | 4,061,375 | 1,127,989 |
| 9/1/2002 | Amendment | 28,326,474 | 30 | 9 | 0 | 15,370,469 | 2,241,476 |
| 9/1/2003 | Assumptions | 20,435,609 | 30 | 10 | 0 | 11,920,210 | 1,615,446 |
| 9/1/2005 | Amendment | 12,867,110 | 30 | 12 | 0 | 8,442,053 | 1,015,230 |
| 9/1/2006 | Amendment | 12,243,623 | 30 | 13 | 0 | 8,431,095 | 965,178 |
| 9/1/2006 | Assumptions | 32,519,474 | 30 | 13 | 0 | 22,393,278 | 2,563,544 |
| 9/1/2007 | Assumption | 43,584,357 | 30 | 14 | 0 | 31,327,856 | 3,432,876 |
| 9/1/2009 | Assumptions | 2,841,020 | 15 | 1 | 0 | 299,381 | 299,381 |
| 9/1/2009 | Experience | 5,073,753 | 15 | 1 | 0 | 534,677 | 534,677 |
| 9/1/2009 | Relief 08 Asset Loss | 34,760,076 | 29 | 15 | 0 | 26,233,516 | 2,764,577 |
| 9/1/2010 | Experience | 6,936,306 | 15 | 2 | 0 | 1,410,945 | 730,972 |
| 9/1/2010 | Relief 08 Asset Loss | 19,337,414 | 28 | 15 | 0 | 14,748,821 | 1,554,282 |
| 9/1/2011 | Relief 08 Asset Loss | 10,134,263 | 27 | 15 | 0 | 7,818,673 | 823,958 |
| 9/1/2012 | Relief 08 Asset Loss | 21,827,033 | 26 | 15 | 0 | 17,051,204 | 1,796,915 |
| 9/1/2013 | Relief 08 Asset Loss | 22,587,104 | 25 | 15 | 0 | 17,886,435 | 1,884,934 |
| 9/1/2014 | Relief 08 Asset Loss | 19,238,145 | 24 | 15 | 0 | 15,461,886 | 1,629,428 |
| 9/1/2015 | Assumptions | 6,918,506 | 15 | 7 | 0 | 4,151,365 | 729,096 |
| 9/1/2015 | Experience | 11,107,701 | 15 | 7 | 0 | 6,665,034 | 1,170,568 |
| 9/1/2016 | Experience | 20,386,733 | 15 | 8 | 0 | 13,527,773 | 2,148,425 |
| 9/1/2017 | Experience | 18,943,784 | 15 | 9 | 0 | 13,689,659 | 1,996,362 |
| 9/1/2018 | Assumptions | 5,919,635 | 15 | 10 | 0 | 4,603,185 | 623,832 |
| 9/1/2018 | Experience | 14,681,216 | 15 | 10 | 0 | 11,416,297 | 1,547,158 |
| 9/1/2019 | Assumptions | 19,014,723 | 15 | 11 | 0 | 15,758,339 | 2,003,838 |
| 9/1/2019 | Experience | 21,934,667 | 15 | 11 | 0 | 18,178,232 | 2,311,551 |
| 9/1/2020 | Assumptions | 3,585,595 | 15 | 12 | 0 | 3,142,087 | 377,862 |
| 9/1/2021 | Assumptions | 1,212,360 | 15 | 13 | 0 | 1,116,043 | 127,763 |
| 9/1/2022 | Experience | 3,962,118 | 15 | 14 | 0 | 3,810,419 | 417,542 |
| 9/1/2023 | Assumptions | 3,256,945 | 15 | 15 | 0 | 3,256,945 | 343,228 |
| 9/1/2023 | Experience | 16,199,851 | 15 | 15 | 0 | 16,199,851 | 1,707,197 |

Appendix C - Minimum Funding Amortization Bases
Michigan Carpenters Pension Plan
September 1, 2023 Actuarial Valuation
Bases Shown: Without Extension

| Date Established | Source of Change in Unfunded Liability | Original Amount | Original Period | Remaining Period | | 9/1/2023 Outstanding Balance | 9/1/2023 Amortization Payment |
|--------------------|--|-----------------|-----------------|--------------------------------------|--------|------------------------------|-------------------------------|
| | | | | Years | Months | | |
| | | | | Total Charges: | | 334,569,408 | 46,202,232 |
| Credits | | | | | | | |
| 9/1/2016 | Assumptions | 6,865,210 | 15 | 8 | 0 | 4,555,462 | 723,480 |
| 9/1/2017 | Assumptions | 13,752,769 | 15 | 9 | 0 | 9,938,384 | 1,449,315 |
| 9/1/2020 | Experience | 1,257,599 | 15 | 12 | 0 | 1,102,045 | 132,530 |
| 9/1/2021 | Experience | 23,818,310 | 15 | 13 | 0 | 21,926,041 | 2,510,056 |
| | | | | Total Credits: | | 37,521,932 | 4,815,381 |
| | | | | Net Charges: | | 297,047,476 | 41,386,851 |
| | | | | Less Credit Balance: | | -26,809,151 | |
| | | | | Less Reconciliation Balance: | | 0 | |
| | | | | Unfunded Actuarial Liability: | | 323,856,627 | |

SUMMARY OF PPA AND MPRA RULES

Background

All multiemployer pension plans in effect on July 16, 2006 are required to engage an actuary to annually certify their status under the Pension Protection Act of 2006 (“PPA”). Such certification must be filed with the government by the 90th day of the plan year.

This Appendix D provides a high-level summary of some of the rules related to PPA, which were further modified in 2015 by the Multiemployer Pension Reform Act of 2014 (“MPRA”). Please seek advice from your actuary or Fund Counsel for more detailed information.

PPA Status Criteria

The table below summarizes the criteria for each PPA status. Projected deficiencies are calculated as of the last day of each plan year and are based on contribution rates codified in bargaining agreements and, if applicable, wage allocations.

| <i>PPA Status</i> | <i>Getting In</i> | <i>Getting Out</i> |
|--------------------------------------|--|--|
| Safe (“green zone”) | A plan is safe if it is not described in any of the other statuses. Generally, a plan that is at least 80% funded and has no projected funding deficiencies in the current year or next 6 years is safe. | A plan leaves safe status when it is certified as being in another status |
| Safe (“green zone”) special rule | Beginning in 2015, a plan that would otherwise be endangered, but was safe for the prior year, remains safe if it is projected to return to safe within 10 years | A plan leaves safe status when it is certified as being in another status |
| Endangered (“yellow zone”) | A plan is endangered if it is <u>not</u> in a worse status <u>and</u> it is described in one of the following: <ul style="list-style-type: none"> • Funded percentage is less than 80%, or • Projected funding deficiency in the current year or next 6 years. | A plan leaves endangered status when it no longer meets the requirements to be classified as endangered or when it enters a worse status |
| Seriously endangered (“orange zone”) | A plan is seriously endangered if it is <u>not</u> in a worse status <u>and</u> it meets <u>both</u> of the following: <ul style="list-style-type: none"> • Funded percentage is less than 80%, <u>and</u> • Projected funding deficiency in the current year or next 6 years. | A plan leaves seriously endangered status when it no longer meets both of the requirements listed or when it enters a worse status |

SUMMARY OF PPA AND MPRA RULES (CONT.)

| PPA Status | Getting In | Getting Out |
|------------------------------|--|--|
| <p>Critical (“red zone”)</p> | <p>A plan is critical if it is described in one or more of the following:</p> <ul style="list-style-type: none"> • Projected funding deficiency (<u>not</u> recognizing extensions) in the current year or next 3 years (next 4 years if funded at less than 65%), or • Funded percentage is less than 65%, <u>and</u>, inability to pay nonforfeitable benefits and expenses for next 7 years, or • (1) Contributions are less than current year costs (i.e. “normal cost”) plus interest on any unfunded past liabilities, <u>and</u>, (2) value of vested benefits for non-actives is greater than for actives, <u>and</u>, (3) projected funding deficiency (<u>not</u> recognizing extensions) in the current year or next 4 years, or • Inability to pay all benefits and expenses for next 5 years. <p>A plan with a 5-year amortization extension under IRC Section 431(d) that previously emerged from critical status in 2015 or later will re-enter critical status <u>only</u> if it is described in one of the following:</p> <ul style="list-style-type: none"> • Projected funding deficiency in the current year or next 9 years (<u>including</u> amortization extensions), or, • Projected insolvency within the next 30 years <p>If a plan is certified as safe or endangered status but projected to be critical within the next 5 years, the Trustees have the <u>option</u> of electing to have the plan treated as critical status immediately.</p> | <p>A plan emerges from critical status when it meets all of the following:</p> <ul style="list-style-type: none"> • No longer meets any of the critical status tests, and, • No projected funding deficiencies in the current year or next 9 years, and, • No projected insolvencies in the next 30 years <p>A plan with a 5-year amortization extension under IRC Section 431(d) emerges from critical status when it meets both of the following:</p> <ul style="list-style-type: none"> • No projected funding deficiencies in the current year or next 9 years, and, • No projected insolvencies in the next 30 years |

SUMMARY OF PPA AND MPRA RULES (CONT.)

| <i>PPA Status</i> | <i>Getting In</i> | <i>Getting Out</i> |
|--|--|--|
| Critical and declining (“deep red zone”) | Beginning in 2015, a plan is in critical and declining status if: <ul style="list-style-type: none"> • It satisfies one or more of the initial four critical status criteria on the previous page, and, • It is projected to become insolvent within the next 15 years (20 years if the plan has a ratio of inactive participants to active participants that exceeds 2 to 1 or if the funded percentage of the plan is less than 80%) | A plan leaves critical and declining when it no longer satisfies the criteria. Status cannot change to safe, endangered, or seriously endangered unless the plan also meets the critical status emergence rules (see above). |

Restrictions for Non-Safe Zone Plans

The Trustees of a plan that is not in safe zone face a number of restrictions in plan improvements that can be adopted and bargaining agreements that can be accepted.

| <i>Period</i> | <i>Endangered/Critical Restrictions</i> |
|--|---|
| Date of first certification through adoption of funding improvement/rehabilitation plan (“plan adoption period”) | <ul style="list-style-type: none"> • No reduction in level of contributions for any participants • No suspension of contributions • No exclusion of new or younger employees • No amendment that increases the <u>liabilities</u> of the plan by reason of any increase in benefits, change in accrual, or change in vesting unless required by law |
| After adoption of a funding improvement/rehabilitation plan until end of funding improvement/rehabilitation period | <ul style="list-style-type: none"> • Cannot be amended so as to be inconsistent with funding improvement/rehabilitation plan • No amendment that increases benefits, including future accruals, unless actuary certifies as being paid for with contributions not contemplated in funding improvement/rehabilitation plan and still expected to meet applicable benchmark after considering the amendment |

Additionally, critical, and critical and declining status plans cannot pay benefits greater than the single life annuity once the initial red zone notice is sent unless the benefit is eligible for automatic cash-out.

SUMMARY OF PPA AND MPRA RULES (CONT.)

Employer Surcharges for Critical Status Plans

When a non-critical plan enters critical status, employers must pay the plan a surcharge equal to 5% of their bargained contributions (the amount increases to 10% after the end of the plan year). The surcharges cannot be used to accrue benefits. Surcharges will generally commence about 5 months into the initial critical plan year.

Once the Trustees have adopted a rehabilitation plan, each set of bargaining parties is asked to adopt one of the schedules contained in such rehabilitation plan. Surcharges cease to apply to contributions made under a CBA where the bargaining parties have adopted a schedule. If this can be accomplished within the first 5 months of the initial critical year, then surcharges can be avoided altogether.

Special Critical/Critical and Declining Status Tools

The Trustees of a plan that is in critical status have the ability (as the result of collective bargaining) to cut “adjustable benefits” that, for the most part, cannot be reduced under other circumstances. Adjustable benefits include early retirement subsidies, optional forms of payment, disability benefits, and death benefits. Normal retirement benefits are never adjustable benefits.

The Trustees of a critical and declining plan may apply to the Treasury Department for approval to suspend certain payments under MPRA (suspensions are benefit cuts that will be restored once they are no longer needed). The suspensions may affect even those participants who are already in pay status. However, certain protections apply to participants who are age 75 or older or are disabled. Furthermore, no one's benefit can be reduced below 110% of the amount guaranteed by the PBGC. While not officially repealed with ARPA (see below), benefit suspensions have effectively been eliminated for existing deeply troubled plans in favor of the special financial assistance program.

SUMMARY OF ARPA RULES

Overview

The American Rescue Plan Act (ARPA) was passed in March 2021 with an interim final rule in July, 2021 and a final rule in July, 2022. ARPA provides options for eligible multiemployer plans to receive special financial assistance and all multiemployer plans to elect funding relief. The PBGC premium will increase to \$52 in 2031 with inflationary increases afterward.

Special Financial Assistance

A multiemployer plan is eligible for the special financial assistance program if:

- The plan is in critical and declining status in any plan year beginning in 2020 through 2022 using 2020 certification assumptions;
- A suspension of benefits has been approved with respect to the plan under MPRA as of the date of the enactment of the law;
- The plan is certified to be in critical status, has a current liability funded percentage of less than 40%, and has a ratio of active to inactive participants which is less than two to three in any plan year beginning in 2020 through 2022; or
- The plan became insolvent after December 16, 2014, and has remained insolvent and has not been terminated as of the date of the enactment of the law.

An eligible plan must submit an application to the PBGC for special financial assistance by December 31, 2025. The PBGC gave priority consideration for special financial assistance to eligible plans that will become insolvent soon, have more than \$1 billion in liabilities, or suspended benefits. Plans without priority consideration will have to enter a wait list until the PBGC reopens the portal for a limited number of applications.

The amount of special financial assistance to be provided by the PBGC shall be the amount required for the plan to pay all benefits due through the last day of the plan year ending in 2051 without any further reductions. This amount will be the best of three different calculations for plans with a MPRA suspension. For this determination, the actuary will use the assumptions from the plan’s 2020 PPA certification except interest rate limits may apply. The special financial assistance will be paid by the PBGC in a single, lump sum payment as soon as practicable upon approval of the application and does not have to be paid back.

Several restrictions do apply for plans receiving special financial assistance including:

- Up to 33% of the special financial assistance can be invested in publicly traded equities or high yield bonds. The rest must be invested in investment-grade bonds;
- The plan will be deemed in critical status through the 2051 plan year end;
- Contribution decreases are not permitted unless it would lessen the risk of loss;
- For the first ten years, only future benefits can be improved if they are paid for with new contributions. Then, past or future increases can be made with PBGC approval if they do not create a projected insolvency;
- Use mass withdrawal interest for EWL for 11 years or when SFA runs out, if later; and
- A statement of compliance must be annually filed with the PBGC.

GLOSSARY OF COMMON PENSION TERMS

Benefits

Accrued Benefit: A benefit that an employee has earned (or accrued) through past participation in the plan. It is the amount payable at normal retirement age.

Why it matters: Under the law, Accrued Benefits generally may not be reduced by plan amendment (note that special rules allowing for limited reduction and/or suspension of accrued benefits apply to critical status, critical and declining status and insolvent plans).

Actuarial Equivalence: Given a set of actuarial assumptions, when two different sets of payment scenarios have an equal present value.

Early Retirement Reduction Factor: A retirement benefit that begins before normal retirement age may be reduced. The plan document defines the amount of the reduction by formula or a table of factors. This reduction may or may not be actuarially equivalent, but its present value can be no less than actuarially equivalent to the benefit payable at normal retirement age.

Benefit Crediting (Accrual) Rate: A general reference to the calculation of the amount of monthly retirement benefit earned per dollar contributed or per year or hour worked.

Assets

Market Value of Assets: This is the fair value of all assets in the fund on an accrued, not cash basis. The market value of assets matches the value in the plan audit.

Actuarial Value of Assets: The amount of assets recognized for actuarial valuation purposes. Recent changes in market value may be partially recognized (there are variations allowed on the exact recognition). Generally the actuarial value is limited to not be less than 80% or more than 120% of the market value.

Why it matters: Many funding calculations use this “smoothed” asset value method to lessen the impact of volatility in the market value of plan assets.

Assumed Rate of Return: Long term assumption of the rate of return on assets based upon the diversification mix of invested assets.

Why it matters: This assumption is used in calculating the present values discussed in the Liabilities section below. The Assumed Rate of Return has an inverse relationship with plan liabilities. In other words, a lower Assumed Rate of Return increases liabilities, while a higher Assumed Rate of Return decreases plan Liabilities.

GLOSSARY OF COMMON PENSION TERMS (CONT.)

Liabilities

Present Value of Accrued Benefits: The discounted value of benefit payments due in the future but based only on the current Accrued Benefits of each participant. The value is based on actuarial assumptions including an assumed rate of investment return.

Why it matters: This liability is one of the primary factors in determining a plan’s annual PPA funded status (see Funded Ratio).

Present Value of Vested Benefits: The discounted value of Accrued Benefits that are considered vested (non-forfeitable). Benefits that are not vested include those of participants who have not satisfied the plan vesting requirement (usually five years of service). In addition under the law some death and temporary disability benefits are also considered non-vested regardless of service because they are not considered protected benefits.

Why it matters: This liability is the primary driver of a plan’s Employer Withdrawal Liability.

Actuarial (Accrued) Liability: For inactive members this is the same as the Present Value of Accrued Benefits above. For active members this depends on the cost method selected by the actuary. Under the accrued benefit or traditional unit credit cost method this is also the same as the Present Value of Accrued Benefits. Under other cost methods (including most commonly entry age normal) this represents an alternate allocation of projected benefit cost over the working lifetime of active members. Under the entry age normal cost method, the active Actuarial Liability is larger than the Present Value of Accrued Benefits.

Unfunded Actuarial Liability: The Actuarial Liability less the Actuarial Value of Assets.

Current Liability: This is similar to the Present Value of Accrued Benefits, but uses a statutory, significantly lower, interest rate (equivalent to an expected rate of return on a bond only-type portfolio) and statutory mortality tables. The lower interest rate means that Current Liability tends to be significantly higher than the Present Value of Accrued Benefits. This number has very little impact on multiemployer plans.

Normal Cost: The present value of all benefits that are expected to accrue or to be earned under the plan during the plan year. The way in which a benefit is considered to be earned varies with the actuarial cost method.

Risk: The potential of future deviation of actual results from expectations derived from actuarial assumptions.

GLOSSARY OF COMMON PENSION TERMS (CONT.)

Funding

Funded Ratio (Funded Percentage): Actuarial Value of Assets divided by the Present Value of Accrued Benefits. This is one of two key measures used to determine a plan's annual PPA funded status. This may also be referred to as PPA Funded Ratio. This must be greater than 80% to avoid endangered status.

Credit Balance: The accumulated excess of actual contributions over legally required minimum contributions as maintained in the funding standard account. The funding standard account is maintained by the actuary in the valuation process and reported annually in schedule MB to the Form 5500 filing. A negative credit balance is known as an accumulated funding deficiency. Prior to PPA, an accumulated funding deficiency caused an immediate excise tax (waiver under PPA if certain conditions are met). After PPA, a current or projected funding deficiency is one of the key measures used in determining the annual PPA status. It can eventually trigger an excise tax levied on contributing employers.

Withdrawal Liability

Unfunded Vested Benefits (UVB): Present Value of Vested Benefits less the value of plan assets determined on either an actuarial or market value basis. The selection of asset measurement is part of the withdrawal liability method of the Plan.

Employer Withdrawal Liability (EWL): An employer that withdraws from a multiemployer plan is liable for its proportionate share of Unfunded Vested Benefits, determined as of the date of withdrawal.

Why it matters: If a contributing employer leaves the plan while it has Unfunded Vested Benefits liability, that employer's allocated share of Employer Withdrawal Liability is either assessed, as applicable, or reallocated among the plan's remaining active employers if the presumptive method is used. A construction employer withdrawing from a construction industry plan will not be assessed unless they continue performing work within the jurisdiction of the CBA or restart such work within a period of 5 years. Small amounts (under \$150,000) are generally reduced or eliminated pursuant to the "de minimis rule."