2020 UPDATED REHABILITATION PLAN
FOR THE
WAREHOUSE EMPLOYEES UNION LOCAL NO. 730 PENSION TRUST FUND

I. Introduction

On March 29, 2019, the actuary of the Warehouse Employees Union Local No. 730 Pension Trust Fund (the "Fund") certified that the Fund is in Critical and Declining Status for the 2019 Plan Year for the purposes of the Employee Retirement Income Security Act ("ERISA") as amended by the Pension Protection Act of 2006 ("PPA"). The Fund has been in Critical Status since 2009.

As required by law, the Board of Trustees sent a Notice of Critical and Declining Status to participants, beneficiaries, Local 730 as the participating union, the participating employers ("Employers"), the Pension Benefit Guaranty Corporation and the Department of Labor, advising that the Fund is in Critical and Declining Status for the 2019 Plan Year and describing the consequences of being in Critical and Declining Status. Similar notices have been distributed annually since the Fund first entered Critical Status in 2009.

As a result of being in Critical Status the Trustees adopted a Rehabilitation Plan on November 26, 2009 and have continued to approve the plan until this revision. The Fund's Rehabilitation Period began on January 1, 2012, and was scheduled to run until December 31, 2024 because the Fund elected to extend its ten-year Rehabilitation Period by an additional three years as permitted under Section 205 of the Worker, Retiree and Employer Recovery Act of 2008. Generally, the Fund must emerge from Critical Status by the end of its thirteen-year Rehabilitation Period, as defined under ERISA. However, the Fund's Board of Trustees has determined that, based on reasonable actuarial assumptions and upon exhaustion of all reasonable measures, the Fund cannot be reasonably expected to emerge from critical status by the end of the Rehabilitation Period. Pursuant to ERISA Section 305(e)(3)(A)(ii), the Board of Trustees adopted this 2020 Updated Rehabilitation Plan to enable the Fund to emerge from critical status at a time later than the end of the extended Rehabilitation Period or to forestall possible insolvency (as defined by ERISA Section 4245).

This 2020 Updated Rehabilitation Plan is based on reasonable assumptions about how the Fund's assets and liabilities will change in the coming years, particularly as a result of changes in the Fund's level of participation. The Board of Trustees will review the Fund's Rehabilitation Plan and will update the Rehabilitation Plan as required by law to the extent necessary to enable the Fund to emerge from critical status at a later time than the end of the Rehabilitation Period or to forestall possible insolvency. In addition, the Board of Trustees will continue to consider all options available to the Fund, including but not limited to reducing Fund expenditures, taking advantage of any changes in law, or exploring a merger with another plan. The Board of Trustees has the sole discretion to amend and construe this Rehabilitation Plan.

Given the findings of the Trustees described in Section II of this Rehabilitation Plan, the Trustees will send the entire updated Rehabilitation Plan to the Union and the Employers. The Board of Trustees will update this Rehabilitation Plan, as required by law. The Board of Trustees has the sole discretion to amend and construe this Rehabilitation Plan.

II. Determination that Section 305(e)(3)(A)(ii) of ERISA Applies

The Board of Trustees considered alternatives to enable the Fund to emerge from Critical Status by the end of the Rehabilitation Period. The alternatives considered were based on projections by the Fund's actuary using reasonable actuarial assumptions. The Fund's actuary projected that Employer contribution rates beginning with 2020 contract anniversaries would have to be increased by 60% every year from when the current contracts expire until 2024 for the Fund to emerge from Critical Status by the end of the rehabilitation period.

The Board of Trustees considered whether it would be reasonable to expect the Fund's largest Employers and the Union to negotiate the increased Employer contributions necessary for the Fund to emerge from Critical Status prior to the end of the Rehabilitation Period. The Trustees concluded that the contribution rate increases stated above, as necessary for the Fund to emerge from Critical Status by the end of the Fund's Rehabilitation Period, are not reasonable and likely could not be negotiated. Therefore the possible outcome of collective bargaining over such extreme rate increases would be negotiated withdrawals from the fund. Upon a mass withdrawal, while the Employer withdrawal liability payments are fixed, participant benefits are at risk for further reduction if Employer liability payments are not collected and the Fund becomes insolvent, thus reducing benefits to the PBGC guaranteed levels.

Based on the above-referenced information and analysis, the Board of Trustees has determined that, upon exhaustion of all reasonable measures, the Fund cannot reasonably be expected to emerge from Critical Status by the end of the Rehabilitation Period.

III. Alternatives Considered

The Board of Trustees noted that the bargaining parties largest employers best know the competitive market and the Employers' potential future in the market. Therefore it would be most prudent to be informed by the parties' negotiations which have most recently yielded a 4.9% annual rate increase. The Trustees have reviewed that result and have no objective reason to reject it. Therefore, the Trustees adopt the 4.9% annual increases for the bargaining parties as contracts continue or expire.

IV. Actions to be Taken by the Board of Trustees

The Fund's Board of Trustees will review the Fund's Rehabilitation Plan as required by law, and will update the Rehabilitation Plan as required by law to enable the Fund to emerge from critical status at a later time (than the end of the Rehabilitation Period) or to forestall possible insolvency. In addition, the Board of Trustees will consider all options available to the Fund, including but not limited to reducing Fund expenditures, that may assist the Fund in emerging from Critical Status.

V. Annual Standards for Meeting the Requirements of this Rehabilitation Plan

The Fund will make adequate progress, to the extent reasonable based on financial markets activity and other relevant factors, toward enabling the Fund to emerge from critical status at a later time (than the end of the Rehabilitation Period) or to forestall possible insolvency, because, based on reasonable actuarial assumptions and upon the exhaustion of all reasonable measures, the Fund is not expected to emerge from Critical Status by the end of the Rehabilitation Period.

2014 UPDATED REHABILITATION PLAN
FOR THE
WAREHOUSE EMPLOYEES UNION LOCAL NO. 730 PENSION TRUST FUND

I. Introduction

On March 31, 2014, the actuary of the Warehouse Employees Union Local No. 730 Pension Trust Fund (the "Fund") certified that the Fund is in Critical Status for the 2014 Plan Year for the purposes of the Employee Retirement Income Security Act ("ERISA") as amended by the Pension Protection Act of 2006 ("PPA"). The Fund has been in Critical Status since 2009.

As required by law, the Board of Trustees sent a Notice of Critical Status to participants, beneficiaries, Local 730 as the participating union, the participating employers ("Employers"), the Pension Benefit Guaranty Corporation and the Department of Labor, advising that the Fund is in Critical Status for the 2013 Plan Year and describing the consequences of being in Critical Status. Similar notices have been distributed annually since the Fund first entered Critical Status in 2009.

As a result of being in Critical Status the Trustees adopted a Rehabilitation Plan on November 26, 2009 and have continued to approve the plan until this revision. The Fund's Rehabilitation Period began on January 1, 2012, and was scheduled to run until December 31, 2024 because the Fund elected to extend its ten-year Rehabilitation Period by an additional three years as permitted under Section 205 of the Worker, Retiree and Employer Recovery Act of 2008. Generally, the Fund must emerge from Critical Status by the end of its thirteen-year Rehabilitation Period, as defined under ERISA. However, the Fund's Board of Trustees has determined that, based on reasonable actuarial assumptions and upon exhaustion of all reasonable measures, the Fund cannot be reasonably expected to emerge from critical status by the end of the Rehabilitation Period. Pursuant to ERISA Section 305(e)(3)(A)(ii), the Board of Trustees adopted this 2014 Rehabilitation Plan to enable the Fund to emerge from critical status at a time later than the end of the extended Rehabilitation Period or to forestall possible insolvency (as defined by ERISA Section 4245).

This 2014 Rehabilitation Plan is based on reasonable assumptions about how the Fund's assets and liabilities will change in the coming years, particularly as a result of changes in the Fund's level of participation. The Board of Trustees will review the Fund's Rehabilitation Plan and will update the Rehabilitation Plan as required by law to the extent necessary to enable the Fund to emerge from critical status at a later time than the end of the Rehabilitation Period or to forestall possible insolvency. In addition, the Board of Trustees will continue to consider all options available to the Fund, including but not limited to reducing Fund expenditures, taking advantage of any changes in law, or exploring a merger with another plan. The Board of Trustees has the sole discretion to amend and construe this Rehabilitation Plan.

Given the findings of the Trustees described in Section II of this Rehabilitation Plan, the Trustees will send the entire updated Rehabilitation Plan to the Union and the Employers. The Board of Trustees will update this Rehabilitation Plan, as required by law. The Board of Trustees has the sole discretion to amend and construe this Rehabilitation Plan.

II. Determination that Section 305(e)(3)(A)(ii) of ERISA Applies

The Board of Trustees considered alternatives to enable the Fund to emerge from Critical Status by the end of the Rehabilitation Period. The alternatives considered were based on projections by the Fund's actuary using reasonable actuarial assumptions. The Fund's actuary projected that, with no further changes to the Fund's current plan of benefits (the "Plan"), Employer contribution rates would have to be increased by 25% every year from when the current contracts expire until 2024 for the Fund to emerge from Critical Status by the end of the Rehabilitation Period. This would have raised the hourly contribution rate of the largest contributor from $5.70 per hour to $53.09 per hour. The Fund's actuary also has projected that, with the elimination of all future benefit accruals and all adjustable benefits, Employer contribution rates would have to be increased by 18% annually for the Fund to emerge from Critical Status by the end of the Rehabilitation Period. This would raise the hourly contribution rate of the largest contributor from $5.70 per hour to $29.83 per hour.

The Board of Trustees considered whether it would be reasonable to expect the Fund's largest Employer and the Union to negotiate the increased Employer contributions necessary for the Fund to emerge from Critical Status prior to the end of the Rehabilitation Period. The Trustees concluded that the contribution rate increases and benefit decreases under the alternatives discussed above, as necessary for the Fund to emerge from Critical Status by the end of the Fund's Rehabilitation Period, are not reasonable and likely could not be negotiated. Solutions in between these two extremes are not likely to occur. Therefore the possible outcome of collective bargaining over these types of alternatives would be negotiated withdrawals from the Fund. Upon a mass withdrawal, while the Employer withdrawal liability payments are fixed, participant benefits are at risk for further reduction if Employer liability payments are not collected and the Fund becomes insolvent, thus reducing benefits to the PBGC guaranteed levels.

Based on the above-referenced information and analysis, the Board of Trustees has determined that, upon exhaustion of all reasonable measures, the Fund cannot reasonably be expected to emerge from Critical Status by the end of the Rehabilitation Period.

III. Alternatives Considered

The Board of Trustees noted that, since the contributions of the Fund's largest Employer makes up over 50% of the Fund's contribution income, and that the bargaining parties best know the competitive market and the employer's potential future in the market, it would be most prudent to be informed by the parties' negotiations. The negotiation with the largest Employer yielded a 4.9% annual rate increase. The Trustees have reviewed that result and have no objective reason to reject it. Therefore, the Trustees for this Plan adopt the 4.9% annual increase for the remaining bargaining parties as contracts expire.

IV. Actions to be Taken by the Board of Trustees

The Fund's Board of Trustees will review the Fund's Rehabilitation Plan as required by law, and will update the Rehabilitation Plan as required by law to enable the Fund to emerge from critical status at a later time (than the end of the Rehabilitation Period) or to forestall possible insolvency. In addition, the Board of Trustees will consider all options available to the Fund, including but not limited to reducing Fund expenditures, that may assist the Fund in emerging from Critical Status.

V. Annual Standards for Meeting the Requirements of this Rehabilitation Plan

The Fund will make adequate progress, to the extent reasonable based on financial markets activity and other relevant factors, toward enabling the Fund to will enable the Fund to emerge from critical status at a later time (than the end of the Rehabilitation Period) or to forestall possible insolvency, because, based on reasonable actuarial assumptions and upon the exhaustion of all reasonable measures, the Fund is not expected to emerge from Critical Status by the end of the Rehabilitation Period.

Classic Values, Innovative Advice

Warehouse Employees Union Local No. 730 Pension Trust

Actuarial Valuation Report as of January 1, 2019

Produced by Cheiron

March 2020

IBT730-0368

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March 02, 2020

Warehouse Employees Union
Local No. 730 Pension Trust
911 Ridgebrook Road
Sparks, Maryland 22102

Dear Trustees:

At your request, we have performed the January 1, 2019 Actuarial Valuation of the Warehouse Employees Union Local No. 730 Pension Trust (the “Fund”). This report contains information on the Fund’s assets and liabilities and discloses contribution levels, including the minimum required amount as mandated by Federal law. This report is for the use of the Board of Trustees and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

Your attention is called to the introductory section in which we refer to the general approach employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions on which our findings are based. Those comments are the basis for our certification that this report is complete to the best of our knowledge and belief. The results of this report are only applicable to the 2019 Plan Year. Future results may differ significantly from the current plan year presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

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

This report was prepared exclusively for the Fund for the purposes described herein. Other users of this valuation report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other users.

Sincerely,

[redacted]A, MAAA, EA
Principal Consulting Actuary

[redacted], EA
Consulting Actuary

FOREWORD

Cheiron has performed the Actuarial Valuation of the Warehouse Employees Union Local No. 730 Pension Trust as of January 1, 2019. The purpose of this report is to:

1) **Measure and disclose**, as of the valuation date, the financial condition of the Fund;

2) **Provide specific information** and documentation required by the Federal Government and the auditors of the Fund; and

3) **Review past and expected trends** in the financial conditions of the Fund.

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

Section I presents a summary of the key valuation results, general comments about the results, a review of historical trends including assets versus liabilities, minimum funding, participation and cash flows, and projection scenarios.

Section II discloses specific risks that may significantly affect the Plan's future financial condition.

Section III contains exhibits relating to the valuation of assets.

Section IV shows the various measures of liabilities.

Section V shows the development of the minimum and maximum contributions.

Section VI provides the calculation of unfunded vested benefits for withdrawal liability purposes as of January 1, 2019 that would be allocated to employers that withdrew during the 2019 calendar year.

Section VII provides the FASB Accounting Standard Codification (ASC) 960 Disclosure required by the Fund's auditor.

The appendices to this report contain a summary of the Fund's membership at the valuation date, a summary of the major provisions of the Fund, and the actuarial methods and assumptions used in the valuation.

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

The actuarial assumptions reflect our understanding of the likely future experience of the Fund and the assumptions, taken individually, represent our best estimate for the future experience of the Fund. Future experience may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

Please note this valuation was prepared using census data and financial information as of the valuation date, January 1, 2019 and events following that date are not reflected.

SECTION I – SUMMARY

The table below sets out the principal results of this year's valuation and compares them to last year's results. Both years reflect the Board adopted funding relief under Internal Revenue Code Sections 431(d) and 431(b)(8).

Table I-1
Summary of Principal Results

	January 1, 2018	January 1, 2019	Change
Participant Counts			
Actives	368	301	(18.2%)
Terminated Vesteds	736	738	0.3%
In Pay Status	978	1,001	2.4%
Total	2,082	2,040	(2.0%)
Financial Information			
Market Value of Assets	$ 167,271,666	$ 153,296,273	(8.4%)
Actuarial Value of Assets	160,515,367	158,236,069	(1.4%)
AVA as a % of MVA	96.0%	103.2%	
Entry Age Actuarial Liability	$ 278,076,443	$ 279,273,711	0.4%
Surplus (Unfunded Actuarial Liability)	(117,561,076)	(121,037,642)	N/A
Present Value of Accrued Benefits/Accrued Liability	$ 274,037,389	$ 275,242,089	0.4%
Accrued Benefit Surplus (Unfunded)	(113,522,022)	(117,006,020)	N/A
Accrued Benefit Funding Ratio (AVA Basis)	58.6%	57.5%	N/A
Present Value of Vested Benefits	$ 270,920,799	$ 272,863,143	0.7%
Vested Benefit Surplus (Unfunded)	(103,649,133)	(119,566,870)	N/A
Vested Benefit Funding Ratio (MVA Basis)	61.7%	56.2%	N/A
Contributions and Cash Flows			
ERISA Credit Balance (Beginning of Year)	$ (16,958,696)	$ (25,845,291)	52.4%
Employer Contributions (actual/*estimated*)	6,123,435	*4,536,702*	(25.9%)
ERISA Minimum Funding before Credit Balance	13,893,560	13,729,626	(1.2%)
Prior Year Benefit Payouts	$ 18,442,083	$ 19,391,415	5.1%
Prior Year Administrative Expenses	356,261	316,151	(11.3%)
Prior Year Total Investment Income (Net)	23,989,967	(391,262)	N/A

SECTION I – SUMMARY

The following is an analysis of the Fund's recent past performance followed by historical results for the last ten years. After that, projections of future results are shown.

General Comments

Investment and liability experience and their effect on future costs traditionally have been the focus of year-to-year analyses.

- The Market Value of Assets (MVA) returned -0.24% during the year ending December 31, 2018. The total actuarial investment loss (the difference between actual and expected returns) was $13.2 million.

- For long-term planning and especially for minimum funding requirements, the Fund develops an Actuarial Value of Assets (AVA) to smooth investment gains and losses over time. Due to the continued phase-in of historical investment gains and losses of the past five years, the rate of return on the AVA was 7.38%, resulting in an actuarial loss of $0.9 million.

- For minimum funding requirements, the Fund's actuarial liability is determined using the Entry Age Normal Cost Method. Although the liability increased by $1.2 million, it increased less than expected, resulting in a liability experience gain of $1.7 million.

- The end of year minimum required contribution, before taking into account the credit balance, decreased from $13.9 million to $13.7 million. The decrease was mostly attributable to the $1.7 million liability gain even though it was partially offset by the $0.9 million AVA loss. This added an annual amortization credit of $0.1 million.

- During the 2018 Plan Year, the Fund's funding deficiency increased from $17.0 million to $25.8 million. Due to the Pension Protection Act of 2006 (PPA), no excise tax is due provided the Fund has a valid Rehabilitation Plan and all employers are complying with it.

PPA added a significant layer of new considerations related to the Fund's PPA funded status.

- For 2019, the Fund was certified as "Critical and Declining" under PPA as amended. This was caused by the current funding deficiencies and the projected insolvency within the next 12 years. The PPA status is re-determined annually.

- The Fund's funding ratio for PPA purposes is based on the accrued liability determined using the Unit Credit Cost Method. It decreased from 58.6% to 57.5% primarily because contributions are less than the benefit payments and expenses, leading to a negative cash flow of approximately 8% of the assets.

- Despite the $1.7 million liability gain, for funding purposes, the Fund's accrued liabilities used in the PPA funding ratio grew by $1.2 million during the 2018 Plan Year.

SECTION I – SUMMARY

- The Board of Trustees of the Fund first adopted a Rehabilitation Plan (RP) on November 26, 2009. The Rehabilitation Plan is applicable for collective bargaining agreements and participation agreements renewed or extended after December 25, 2009. The Fund's Rehabilitation Period began on January 1, 2012.

  After the initial adoption of the Rehabilitation Plan, subsequent employer withdrawals resulted in a deterioration of the funding of the plan. Consequently, in 2014 the Trustees updated the Rehabilitation and adopted a "reasonable measures to forestall insolvency" approach for PPA compliance. As a result of this update and annual reviews of the RP in light of then current conditions, all future contracts must include 4.9% annually compounded contribution increases.

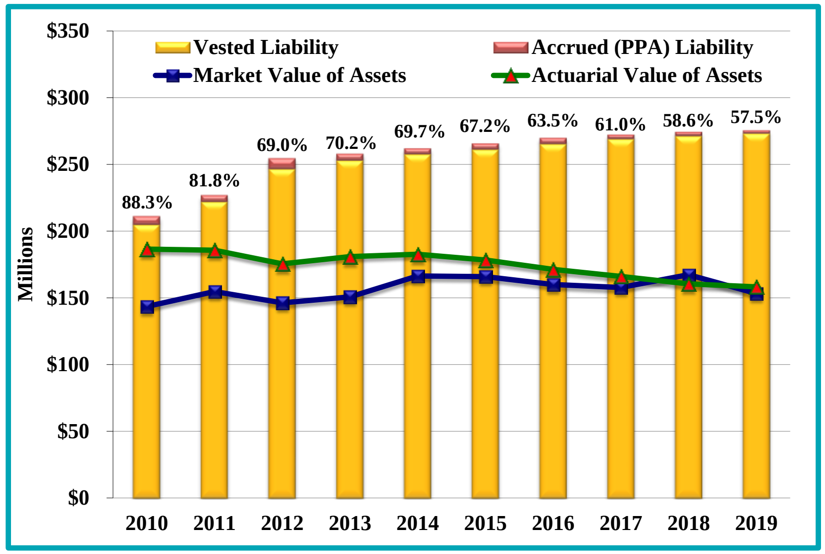
- In February 2010, the Trustees took a five-year extension of the Fund's amortization bases as of January 1, 2009 under Section 431(d) of the Code. The net impact on the Funding Standard Account is an $18.9 million smaller funding deficiency, as of January 1, 2019, from what it would be without the Section 431(d) extension. Unless indicated otherwise, throughout this report, the terms credit balance and funding deficiency refer to the amounts reflecting the 431(d) extension.

- The Unfunded Vested Benefits (UVB) on a market value basis increased from $103.6 million to $119.6 million. Under the provisions of the Multiemployer Pension Plan Amendment Act of 1980 (MPPAA) if the vested benefit liabilities exceed fund assets, an assessment of Withdrawal Liability may be made to any employer withdrawing from the Fund.

Historical Summary

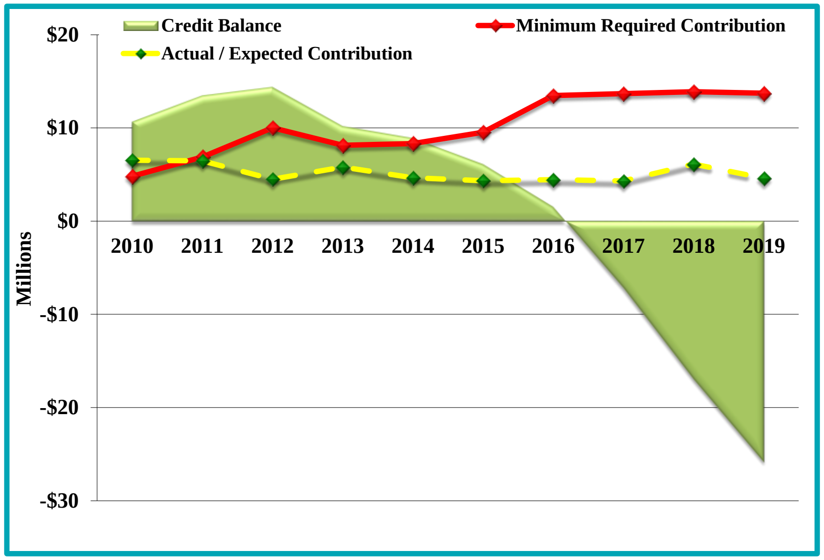
It is important to take a step back from the results and view them in the context of the Plan's recent history. Below are two charts which display key results in the valuations of the last ten years.

Assets & Liabilities: The following graph compares historical assets and liabilities. The gold bars represent the present value of vested benefits while the red bars add the additional non-vested benefits making up the Accrued Liability. The blue line is the Market Value of Assets and the green line is the Actuarial Value of Assets. The percentages shown on top of the bars represent the Fund's PPA funding ratio (AVA as a percentage of Accrued Liabilities).



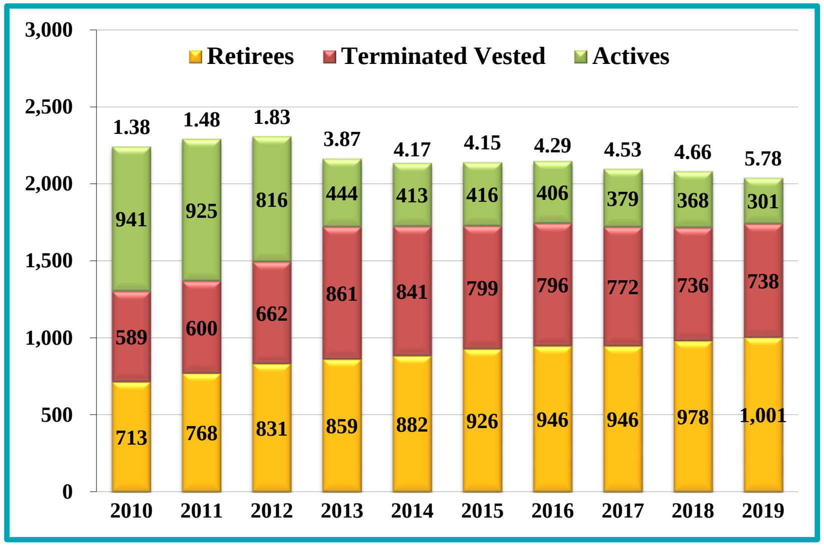
SECTION I – SUMMARY

Minimum Funding: The next graph shows the Credit Balance (green area) which is the accumulated contributions in excess of the Minimum Required Contribution before the Credit Balance (red line), and the Actual Contributions (yellow line).



On average, the contributions for the last ten years have been significantly lower than the minimum required contribution. This has caused a steep decline in the credit balance since 2012 leading to a funding deficiency beginning in 2017. Contributions, including expected Withdrawal Liability payments, are expected to again fall short of the minimum required contribution next year.

Participation: The following graph shows the participation of the Fund at successive valuation dates. The numbers above each bar represent the number of inactive members to active members (i.e., support ratio) at each valuation date. The support ratio increased significantly as of January 1, 2013 due to the withdrawal of two participating employers (Jessup and McKesson) during 2012. Another increase is noticeable this year as a result of the 2018 withdrawal of Adams Burch.

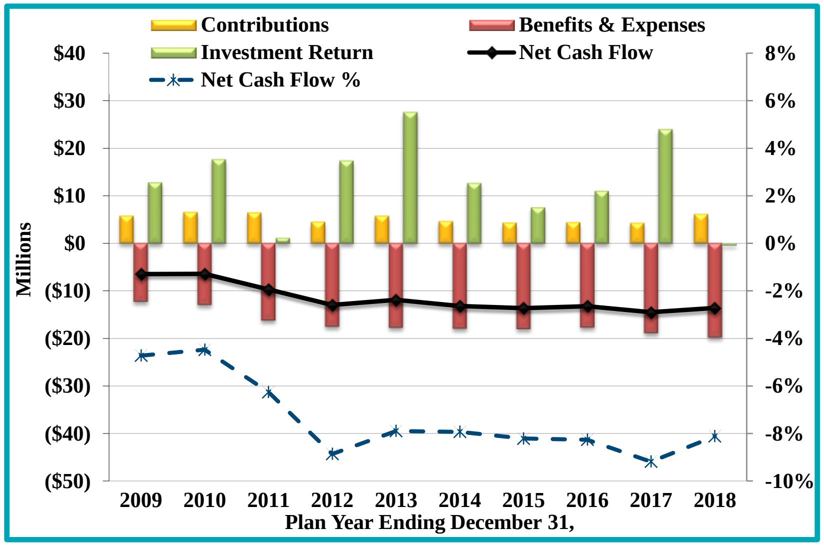


Further declines in active membership will reduce future contributions and increase the negative cash flow, which will put more pressure on the overall plan funding.

SECTION I – SUMMARY

Cash Flow: The following graph shows the Fund's cash flow, contributions less benefit payments and expenses, at successive valuation dates. This is a critical measure, as it reflects the ability to have funds available to meet benefit payments without having to make difficult investment decisions, especially during volatile markets.

The main consequence for a fund with negative cash flow is that the impact of market fluctuations will be more severe. This is because assets will have to be used to pay benefits in down markets. This means there will be less principal left to benefit from later favorable investment experience.

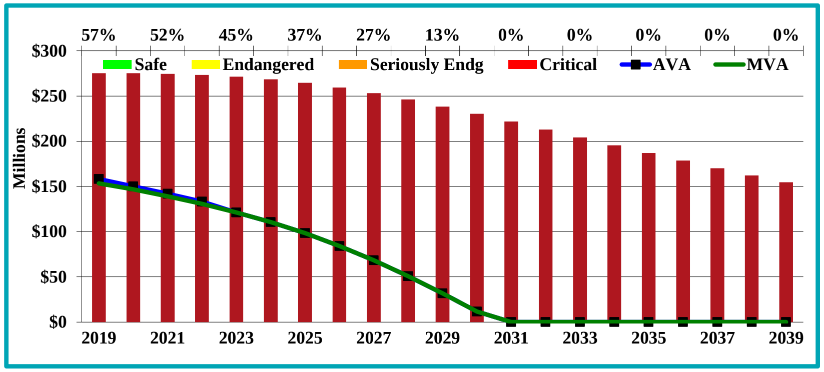


Future Outlook

In this section we move away from viewing a single year's results or historical trends and focus on the future of the Fund. In light of the Fund's "Critical and Declining" classification, this future outlook focuses on the projection of assets.

The following projection assumes participation remains constant, contributions increase 4.9% annually, the expected Withdrawal Liability payments from McKesson Drug continue, and all of the assumptions set out in Appendix C are realized including the return of 8% per year.

Under this scenario, the projection shows the Fund will exhaust its assets during 2030. This is one year earlier than last year's projection showed. This decline is mainly the result of the return on the Market Value of Assets during 2018 falling short of the expected 8%.



SECTION II – RISK ANALYSIS

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. In our opinion, the assumptions we are using are our best estimate of the Fund's long-term future experience.

Nonetheless, it is important to realize that future experience could deviate, sometimes significantly, from that predicted by our assumptions. This deviation of actual experience compared to expected experience can affect the future viability of the Fund and must be monitored closely.

This section of the report is intended to identify the primary risks to this fund, provide some background information about those risks and the factors that influence them, and provide an assessment of them.

Identification of Risks

The primary risk that every plan faces is future insolvency. This is the risk that its current assets and future contributions are or will be inadequate to fund all plan benefits. For some plans, this risk is small. For others it is significant. This insolvency risk can manifest itself in several different ways:

- An impending insolvency date, a near term date when its assets will be completely depleted,
- Funded ratios that are declining, especially if they are currently less than 100%, and
- Funded ratios that are never expected to exceed 100%.

As shown in the previous section, under the baseline projection scenario, the Fund is projected to become insolvent during the 2030 plan year. Once the Fund becomes insolvent, benefits are required to be reduced to the PBGC guaranteed level. While this will have little or no impact for some participants, it could result in significant reductions in the monthly benefit amount being paid for others.

The remainder of this section focuses on how the potential insolvency date could change thereby changing the amount of time before such benefit cuts would go into effect. The key items that will impact this date are:

- Investment returns,
- Contributions, and
- Withdrawal Liability payments.

Other risk factors that are not explicitly identified may also turn out to be important.

Investment Risk is the potential for investment returns to be different than expected. The current assumption for investment returns is 8.00% per year net of investment expenses. This is a long-term expectation. In any given year, investment returns can be greater than or less than this assumption. However, over time the geometric mean of the actual investment returns over time should be close to the assumption.

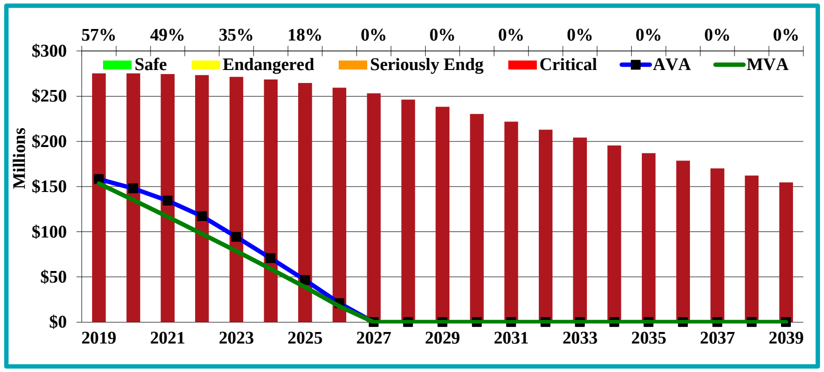
Lower investment returns than anticipated will decrease the expected future funding ratio and increase the FSA contribution requirement which will lower the credit balance in the future.

The potential magnitude and volatility of future investment returns is influenced by economic conditions and the Fund's

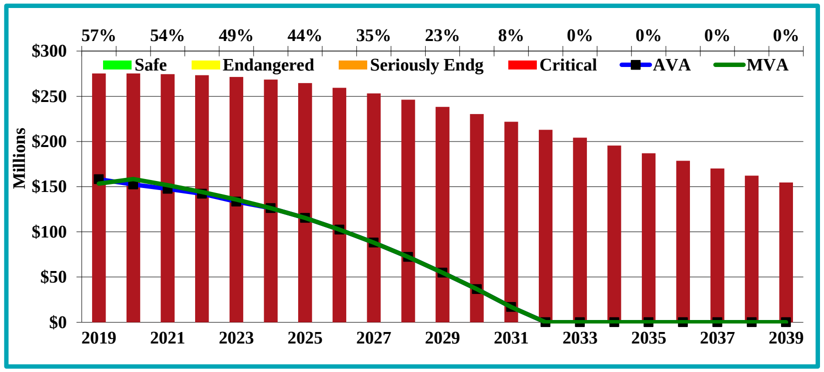
SECTION II – RISK ANALYSIS

asset allocation. A plan with an investment portfolio generating higher expected rates of return may anticipate lower future contribution requirements; however, this approach also comes with higher amounts of volatility.

Due to the significant underfunding and large negative net cash flow, investment returns have a much less significant impact upon the projected insolvency date. The following projection illustrates the impact of investment returns by assuming a 0% return going forward. Under this scenario, the Fund is projected to be insolvent during the 2026 plan year, four years earlier than the baseline.



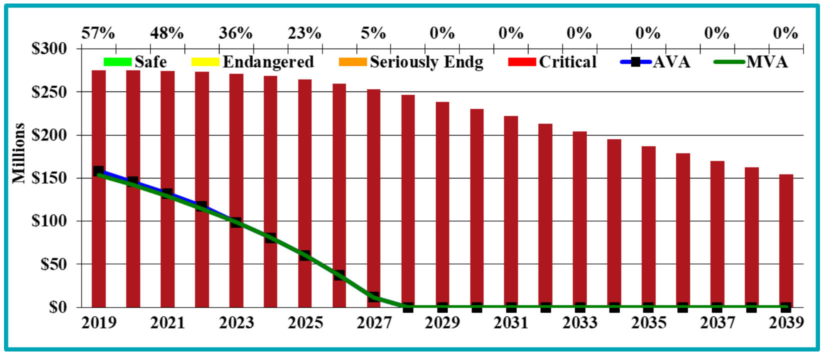
Alternatively, if the Fund were to earn 16% for the 2019 plan year, the insolvency date is pushed back to 2031, as shown in the following projection.



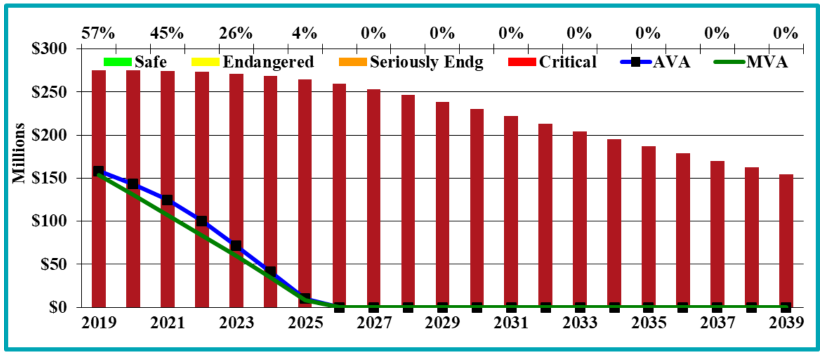
Contribution and Withdrawal Liability Payment risk is the potential for actual future money coming into the Fund to deviate from what is expected in the baseline projection. In particular, additional future withdrawals can reduce the regular contribution income. Additionally, bankruptcies can impact the willingness or ability of previously withdrawn employers to make their required withdrawal liability payments to the Fund.

The following projection illustrates the contribution and withdrawal liability risk by showing the impact of fully eliminating all such income. In this projection the Fund is projected to be insolvent during the 2027 plan year.

SECTION II – RISK ANALYSIS



The combination of no investment returns and the elimination of all future contribution and withdrawal liability income would move the insolvency into the 2025 plan year, as shown below.



SECTION III – ASSETS

Assets at Market Value

Market values represent "snap-shot" or "cash-out" values, which provide the principal basis for measuring financial performance from one year to the next.

Table III-1
Statement of Assets at Market Value, December 31

	2017	2018
Invested Assets		
Common Stocks	$ 46,974,592	$ 34,941,233
U.S. Government Agencies Notes and Bonds	1,769,586	860,220
Corporate Notes and Bonds	3,918,005	1,721,131
Limited Partnerships & DFEs	85,515,091	82,762,206
Common Collective Trusts	25,753,271	21,110,554
Temporary Investments	1,521,708	6,942,729
Other (Fund of Funds)	101,069	0
Total Investments:	$ 165,553,322	$ 148,338,073
Other Assets		
Employer Contributions Receivable	340,118	378,288
Accrued Interest and Dividends	79,748	74,708
Other Receivables	1,996	5,639
Prepaid Expenses	20,813	21,668
Cash	1,566,858	1,646,727
Accounts Payable	(291,189)	(125,220)
Accounts Receivable	0	2,956,390
Total Non-Invested Assets:	$ 1,718,344	$ 4,958,200
Net Assets Available for Benefits	$ 167,271,666	$ 153,296,273

The table above shows the market value of assets taken into account for funding purposes. These values exclude receivable withdrawal liability payments because they are not "receivable" as defined by the IRS. At December 31, 2018, the amount including this receivable shown in the audited financial statement was $159,289,655.

Changes in Market Value

The components of asset change are:

- Contributions
- Benefit payments
- Expenses
- Investment income (realized and unrealized)

The specific changes during 2018 are presented below.

Table III-2 *
Changes in Market Values

Value of Assets - January 1, 2018	$ 167,271,666
Employer Contributions	3,759,761
Withdrawal Liability Payments	2,363,674
Investment Return (Gross)	909,732
Benefit Payments	(19,391,415)
Administrative Expenses	(316,151)
Investment Expenses	(1,300,994)
Value of Assets - January 1, 2019	$ 153,296,273

* On this table $1,000 of other income is classed as investment income.

SECTION III – ASSETS

Investment Performance

The following table calculates the actuarial investment gain/loss and the return for the plan year on a market value basis. The return is an appropriate measure for comparing the actual asset performance to the long-term 8% assumption.

Table III-3
Change in Market Value of Assets

Item	Market Value
January 1, 2018 value	$ 167,271,666
2018 Employer Contributions	3,759,761
2018 Withdrawal Liability Payments	2,363,674
2018 Benefit Payments	(19,391,415)
Actual Administrative Expenses	(316,151)
Expected Investment Earnings (8%)	12,848,821
Expected Value December 31, 2018	$ 166,536,356
Investment Gain / (Loss)	(13,240,083)
January 1, 2019 value	$ 153,296,273
Investment Return	-0.24%

Assets at Actuarial Value

For long-term planning, actuaries developed an actuarial value of assets using smoothing techniques to mitigate the effects of short-term volatility exhibited by the capital markets. The asset valuation method, adopted with the 2007 valuation, phases in actuarial investment gains and losses over five years. The actuarial value of assets is then constrained, if necessary, so that it is not more than 120% of the market value and is not less than 80% of the market value. The asset valuation method is described more fully in Appendix C.

The table below shows the development of the actuarial value of assets.

Table III-4
Development of Actuarial Value of Assets

Market Value of Assets as of January 1, 2019				$ 153,296,273
Plan Year	Investment Gains / (Losses)	Percent Recognized	Percent Deferred	Amount Deferred
12/31/2014	(78,622)	100%	0%	0
12/31/2015	(5,127,301)	80%	20%	(1,025,460)
12/31/2016	(1,210,474)	60%	40%	(484,190)
12/31/2017	11,936,534	40%	60%	7,161,920
12/31/2018	(13,240,083)	20%	80%	(10,592,066)
Total				$ (4,939,796)
Preliminary Actuarial Value of Assets January 1, 2019				$ 158,236,069
120% of MV, upper limit for actuarial value				183,955,528
80% of MV, lower limit for actuarial value				122,637,018
Actuarial Value of Assets January 1, 2019				$ 158,236,069
- as a percent of Market Value of Assets				103.2%

Asset Gain/(Loss)

The following table calculates the investment gain/loss and the return for the plan year on an actuarial value basis. This gain/loss is one component of the Fund's overall actuarial experience gain/loss, which is recognized for minimum funding requirements.

Over 2018, the Fund's assets at actuarial value produced an actuarial loss of $944,726.

Table III-5
Change in Actuarial Value of Assets

Item	Actuarial Value
January 1, 2018 value	$ 160,515,367
2018 Employer Contributions	3,759,761
2018 Withdrawal Liability Payments	2,363,674
2018 Benefit Payments	(19,391,415)
Expected Administrative Expenses	(358,623)
Expected Investment Earnings (8%)	12,292,031
Expected Value December 31, 2018	$ 159,180,795
Investment Gain / (Loss)	(944,726)
January 1, 2019 value	$ 158,236,069
Investment Return	7.38%

SECTION IV – LIABILITIES

In this section, we present detailed information on the Fund's liabilities including:

- **Disclosure** of the Fund's liabilities at January 1, 2018 and January 1, 2019; and
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which they are used.

- **Actuarial Liabilities:** Used in determining minimum funding requirements, maximum tax-deductible contributions, and long-term funding targets, this amount is calculated using the **Entry Age Normal Cost Method.**
- **Accrued Liabilities:** Used for communicating the current levels of liabilities, these liabilities represent the total amount of money needed to fully pay off all future obligations of the Fund using funding assumptions and assuming no further accrual of benefits. They are determined using the **Unit Credit Cost Method**.

  These liabilities are used for determining funded status under PPA. The law requires them to be compared to the actuarial value of assets to measure funded status. They can also be used to establish comparative benchmarks with other plans.

  The accrued liabilities must also be included in the Fund's financial statement for accounting disclosure purposes (FASB ASC Topic No. 960). However, the accounting disclosure must also include the present value of future administrative expenses. This sum is called the Present Value of Accumulated Benefits.

- **Vested Liabilities:** Used for administrative purposes in determining employer withdrawal liability, this liability represents that portion of the accrued liabilities, which are vested.
- **Current Liabilities:** Used for Federal Government compliance purposes, the calculation of this liability is defined by federal regulations and is used to determine maximum allowable tax-deductible contributions.

The table on the following page discloses each of these liabilities for the current valuation and the prior one. With respect to each disclosure, a subtraction of the appropriate value of fund assets yields, for each respective type, a **surplus or unfunded liability**.

SECTION IV – LIABILITIES

Table IV-1
Liabilities/Net Surplus (Unfunded)

	January 1, 2018	January 1, 2019
ACTUARIAL LIABILITY		
Active Participant Benefits	$ 48,340,866	$ 47,049,955
Retiree and Inactive Benefits	229,735,577	232,223,756
Actuarial Liability	**$ 278,076,443**	**$ 279,273,711**
Actuarial Value of Assets	160,515,367	158,236,069
Net Surplus (Unfunded)	**$ (117,561,076)**	**$ (121,037,642)**
ACCRUED LIABILITY		
Active Participant Benefits	$ 44,301,812	$ 43,018,333
Retiree and Inactive Benefits	229,735,577	232,223,756
Accrued Liability	**$ 274,037,389**	**$ 275,242,089**
Actuarial Value of Assets	160,515,367	158,236,069
Net Surplus (Unfunded)	**$ (113,522,022)**	**$ (117,006,020)**
VESTED LIABILITY		
Accrued Liability	$ 274,037,389	$ 275,242,089
Less Present Value of Non-Vested Benefits	3,116,590	2,378,946
Vested Liability	**$ 270,920,799**	**$ 272,863,143**
Actuarial Value of Assets	160,515,367	158,236,069
Net Surplus (Unfunded)	**$ (110,405,432)**	**$ (114,627,074)**
CURRENT LIABILITY (RPA 1994)		
Current Liability	**$ 486,394,917**	**$ 474,757,777**
Market Value of Assets	167,271,666	153,296,273
Net Surplus (Unfunded)	**$ (319,123,251)**	**$ (321,461,504)**

Allocation of Liabilities by Type

The Fund's participants may qualify for a benefit upon death, termination, and disability as well as upon retirement. The value of the liabilities arising from each of these sources is shown in the following table.

Table IV-2
Allocation of Liabilities by Type

Benefit Type	Retirement	Termination	Death	Expenses	Total
Entry Age Normal Cost	$ 533,949	$ 166,339	$ 7,757	$ 353,198	$ 1,061,243
Entry Age Actuarial Liability					
Actives	$ 46,620,217	$ 178,051	$ 251,687	$ 0	$ 47,049,955
Terminated Vesteds	0	80,586,231	0	0	80,586,231
Retirees and Beneficiaries	145,708,786	0	5,928,739	0	151,637,525
Total	$ 192,329,003	$ 80,764,282	$ 6,180,426	$ 0	$ 279,273,711
Current Liability Normal Cost	$ 2,260,729	$ 237,323	$ 16,004	$ 0	$ 2,514,056
Current Liability					
Actives	$ 79,736,357	$ 3,577,335	$ 443,210	$ 0	$ 83,756,902
Terminated Vesteds	0	157,595,714	0	0	157,595,714
Retirees and Beneficiaries	224,322,269	0	9,082,892	0	233,405,161
Total	$ 304,058,626	$ 161,173,049	$ 9,526,102	$ 0	$ 474,757,777
Vested Current Liability					
Actives	$ 36,285,054	$ 43,613,774	$ 439,073	$ 0	$ 80,337,901
Terminated Vesteds	0	157,595,714	0	0	157,595,714
Retirees and Beneficiaries	224,322,269	0	9,082,892	0	233,405,161
Total	$ 260,607,323	$ 201,209,488	$ 9,521,965	$ 0	$ 471,338,776

SECTION IV – LIABILITIES

Changes in Liabilities

Each of the liabilities shown in the table below is subject to change at successive valuations as the experience of the Fund varies from that assumed in the valuation. The liabilities may change for any of several reasons, including:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments
- Interest on liabilities
- Benefits paid to retirees
- Participants leaving employment at rates different from expected
- Changes in actuarial assumptions
- Changes in actuarial methods

Table IV-3
Reconciliation of Liabilities

	Actuarial Liability	Accrued Liability
Liabilities as of January 1, 2018	$ 278,076,443	$ 274,037,389
Liabilities as of January 1, 2019	$ 279,273,711	$ 275,242,089
Liability Increase (Decrease)	$ 1,197,268	$ 1,204,700
Change Due due to:		
Plan Amendment	$ 0	$ 0
Assumption Change	0	0
Accrual of Benefits	769,678	1,163,200
Passage of Time (Interest less benefits paid)	2,155,540	1,863,898
Other Sources	0	0
Actuarial Liability (Gain) / Loss	(1,727,950)	(1,822,398)
Total Change	$ 1,197,268	$ 1,204,700

SECTION V – CONTRIBUTIONS

In this section, we present detailed information on the Fund's contributions from two perspectives:

- **Actuarially determined** contributions or actuarial cost and
- **Government Limits,** which could affect the above.

Actuarial Determined Contributions

For this Fund, the cost method used to calculate the actuarially determined contribution is the **Entry Age Normal Cost Method**. The actuarially determined contribution or cost is determined in two parts.

The first part is the **Entry Age Normal Cost**. This is the level cost of providing the benefits promised by the Fund to each individual participant in service at the valuation date assuming that contributions are made over the period of the participant's working life. The normal cost includes a provision for the Fund's expenses.

The second part is an amortization payment to pay off the unfunded actuarial liability. The unfunded actuarial liability is the difference between the actuarial assets of the Fund at the valuation date and the assets the Fund should hold as determined by the actuarial cost method. The amortization payment is determined using the amortization schedule established by the IRS minimum funding rules.

Government Limits

ERISA and the IRS tax code place various limits on the contributions made to qualified pension plans. The limits impact the minimum that must be paid, the maximum that can be deducted and the timing of contributions. Pension plans are required to retain an Enrolled Actuary to report on the progress of funding through completion of Schedule MB to Form 5500 on an annual basis. The actuarially determined contribution/cost for 2019 is shown in the following table compared to the various Government Limits and the estimated employer contributions (including withdrawal liability payments).

The table below summarizes the results of the tables on the following pages. It also shows the per capita actuarially determined contribution/actuarial cost and per capita expected contribution. The cost is almost three times the expected contribution.

Table V-1
Contributions for 2019

Actuarially Determined Contribution		
Entry Age Normal Cost	$	708,045
Administrative Expense		353,198
Amortization Payment		11,651,374
Interest to End of Year		1,017,009
Total	$	13,729,626
Government Limits		
Maximum Deductible Contribution	$	509,636,618
Minimum Required Contribution (before Credit Balance)	$	13,729,626
Funding Deficiency (with interest to End of Year)	$	27,912,914
Minimum Contribution (after Credit Balance)	$	41,642,540
Employer Contributions with Interest*	$	4,714,679
Count of Active Participants		301
Per Capita Actuarial Cost	$	45,613
Per Capita Contribution	$	15,663

* Estimated contributions of $4,536,702 (including interest to end of year)

SECTION V – CONTRIBUTIONS

Table V-2
Funding Standard Account for 2018 and 2019 Plan Years

	2018	2019
1. Charges For Plan Year		
a. Funding Deficiency	$ 16,958,696	$ 25,845,291
b. Normal Cost with Expenses	1,128,301	1,061,243
c. Amortization Charges	20,988,707	20,988,701
d. Interest on a. and b. to Year End	3,126,056	3,831,619
e. Additional Funding Charge	N/A	N/A
f. Interest Charge due to Late Quarterly Contributions	N/A	N/A
g. Total Charges	$ 42,201,760	$ 51,726,854
2. Credits For Plan Year		
a. Prior Year Credit Balance	$ 0	$ 0
b. Employer Contributions (actual/*expected*)	6,123,435	*4,536,702*
c. Amortization Credits	9,252,601	9,337,327
d. Interest on a., b., and c. to Year End	980,433	924,963
e. Full Funding Limit Credit	0	0
f. Total Credits	$ 16,356,469	$ 14,798,992
3. Credit Balance at End of Year [2. - 1., not less than $0]	$ 0	$ 0
4. Funding Deficiency at End of Year [1. – 2., not less than $0]	$ 25,845,291	$ 36,927,862

SECTION V – CONTRIBUTIONS

Table V-3
Calculation of the Maximum Deductible Contribution for the Plan Year Starting January 1, 2019

1. "Fresh Start" Method		
a. Normal Cost with Expenses	$	1,061,243
b. Net Charge to Amortize Unfunded Actuarial Liability Over 10 years		16,702,017
c. Interest on a. and b.		1,421,061
d. Total		19,184,321
e. Minimum Required Contribution at Year End		41,642,540
f. Larger of d. and e.		41,642,540
g. Full Funding Limitation as of Year End		274,961,343
h. Regular Maximum Deductible Contribution, lesser of f. and g.	$	41,642,540
2. 140% of Current Liability Calculation*		
a. RPA 1994 Current Liability at Start of Year	$	474,757,777
b. Present Value of Benefits Estimated to Accrue during Year		2,514,056
c. Expected Benefit Payments		22,188,869
d. Net Interest on a., b. and c. at Current Liability Interest Rate		14,267,586
e. Expected Current Liability at End of Year, [a. + b. – c. + d.]		469,350,550
f. 140% of e.		657,090,770
g. Actuarial Value of Assets		158,236,069
h. Expected Expenses at Start of Year		353,198
i. Net Interest on c., g. and h. at Valuation Interest Rate		11,760,150
j. Estimated Value of Assets, [g. – c. – h. + i.]		147,454,152
k. Unfunded Current Liability at Year End, [f. – j.]	$	509,636,618
3. Maximum Deductible Contribution at Year End, greater of 1. and 2.	$	509,636,618

* Based on combined mortality specified in Reg. §1.412(l)(7)-1 and an interest rate of 3.06%.

SECTION V – CONTRIBUTIONS

Table V-4
Development of Actuarial Gain/(Loss)
for the Year Ended December 31, 2018

1.	Unfunded Actuarial Liability at Start of Year	$	117,561,076
2.	Normal Cost (with expenses) at Start of Year	$	1,128,301
3.	Interest on 1. and 2. to End of Year	$	9,495,150
4.	Employer Contributions for Year	$	6,123,435
5.	Interest on 4. to End of Year	$	240,226
6.	Change in Unfunded Actuarial Liability Due to Changes in Plan Design	$	0
7.	Change in Unfunded Actuarial Liability Due to Changes in Assumptions	$	0
8.	Expected Unfunded Actuarial Liability at End of Year [1. + 2. + 3. – 4. - 5. + 6.+ 7.]	$	121,820,866
9.	Actual Unfunded Actuarial Liability at End of Year, not less than zero	$	121,037,642
10.	Actuarial Gain / (Loss) [8. – 9.]	$	783,224
	(a) Liability Gain / (Loss)	$	1,727,950
	(b) Asset Gain / (Loss)	$	(944,726)

SECTION V – CONTRIBUTIONS

Table V-5
Schedule of Amortizations Required for Minimum Required Contribution as of January 1, 2019

Type of Base	Date Established	1/1/2019 Outstanding Balance	Remaining Amortization Years [1]	Beginning of Year Amortization Amount
CHARGES				
1. Change in Actuarial Cost Method	01/01/1984	$ 542,706	2	$ 281,792
2. Increase in Employer Contributions	01/01/1985	62,897	1	62,897
3. Increase in Employer Contributions	01/01/1986	5,961	2	3,094
4. Plan Amendments	01/01/1986	214,417	2	111,332
5. Increase in Employer Contributions	01/01/1987	256,593	3	92,192
6. Change in Actuarial Assumptions	01/01/1988	28,688	4	8,020
7. Increase in Employer Contributions	01/01/1988	375,466	4	104,965
8. Increase in Employer Contributions	01/01/1989	542,038	5	125,702
9. Increase in Employer Contributions	01/01/1990	538,587	6	107,874
10. Increase in Employer Contributions	01/01/1991	974,534	7	173,316
11. Plan Amendments	01/01/1992	28,660	8	4,619
12. Increase in Employer Contributions	01/01/1992	421,590	8	67,928
13. Change in Actuarial Cost Method	01/01/1992	330,102	2	171,400
14. Change in Actuarial Assumptions	01/01/1992	1,226,121	8	197,558
15. Increase in Employer Contributions	01/01/1993	719,509	9	106,647
16. Increase in Employer Contributions	01/01/1994	941,401	10	129,905
17. Increase in Employer Contributions	01/01/1995	810,490	11	105,120
18. Plan Amendments	01/01/1996	473,518	12	58,180
19. Increase in Employer Contributions	01/01/1996	907,497	12	111,500
20. Plan Amendments	01/01/1997	31,712	13	3,716
21. Increase in Employer Contributions	01/01/1997	988,578	13	115,811
22. Increase in Employer Contributions	01/01/1998	437,956	14	49,188
23. Plan Amendments	01/01/1998	7,951,295	14	893,025
24. Increase in Employer Contributions	01/01/1999	1,394,583	15	150,860
25. Plan Amendments	01/01/1999	3,147,813	15	340,517
26. Increase in Employer Contributions	01/01/2000	357,319	16	37,379
27. Plan Amendments	01/01/2001	307,067	17	31,169

[1] The remaining amortization period for the charge bases established prior to 1/1/2009 reflect a 5-year automatic extension granted under 431(d).

SECTION V – CONTRIBUTIONS

Table V-5
Schedule of Amortizations Required for Minimum Required Contribution as of January 1, 2019

Type of Base	Date Established	1/1/2019 Outstanding Balance	Remaining Amortization Years [1]	Beginning of Year Amortization Amount
CHARGES				
28. Change in Actuarial Assumptions	01/01/2001	$ 568,463	17	$ 57,704
29. Experience Loss	01/01/2001	153,226	2	79,562
30. Increase in Employer Contributions	01/01/2001	1,913,339	17	194,220
31. Plan Amendments	01/01/2002	495,174	18	48,923
32. Increase in Employer Contributions	01/01/2002	1,744,886	18	172,392
33. Experience Loss	01/01/2002	553,827	3	198,986
34. Increase in Employer Contributions	01/01/2003	1,957,481	19	188,729
35. Experience Loss	01/01/2003	2,985,271	4	834,553
36. Increase in Employer Contributions	01/01/2004	1,764,831	20	166,438
37. Experience Loss	01/01/2004	2,577,524	5	597,740
38. Increase in Employer Contributions	01/01/2005	1,996,270	21	184,530
39. Experience Loss	01/01/2005	2,526,881	6	506,113
40. Recognized Portion of the 2008 ENIL	01/01/2009	38,584,066	19	3,720,062
41. Bifurcation Base	01/01/2009	6,752,862	10	931,830
42. Bifurcation Base	01/01/2010	4,094,792	6	820,154
43. Recognized Portion of the 2008 ENIL	01/01/2011	5,580,290	19	538,021
44. Method Change	01/01/2011	3,976,938	2	2,064,950
45. Recognized Portion of the 2008 ENIL	01/01/2012	17,866,695	19	1,722,607
46. Assumption Change	01/01/2012	10,024,183	8	1,615,145
47. Recognized Portion of the 2008 ENIL	01/01/2013	5,972,294	19	575,815
48. Recognized Portion of the 2008 ENIL	01/01/2014	3,767,832	19	363,274
49. Experience Loss	01/01/2015	3,941,415	11	511,203
50. Experience Loss	01/01/2016	6,200,661	12	761,849
51. Experience Loss	01/01/2017	2,319,616	13	271,742
52. Experience Loss	01/01/2018	1,927,254	14	216,453
TOTAL CHARGES		$ 154,263,169		$ 20,988,701

[1] The remaining amortization period for the charge bases established prior to 1/1/2009 reflect a 5-year automatic extension granted under 431(d).

SECTION V – CONTRIBUTIONS

Table V-5
Schedule of Amortizations Required for Minimum Required Contribution as of January 1, 2019

Type of Base	Date Established	1/1/2019 Outstanding Balance	Remaining Amortization Years	Beginning of Year Amortization Amount
CREDITS				
1. Change in Actuarial Assumptions	01/01/1994	$ 184,602	5	$ 42,810
2. Change in Actuarial Assumptions	01/01/1996	1,785,563	7	317,552
3. Change in Actuarial Assumptions	01/01/1999	148,198	10	20,452
4. Change in Actuarial Assumptions	01/01/2002	802,443	13	94,005
5. Experience Gain	01/01/2006	1,144,275	2	594,143
6. Experience Gain	01/01/2007	621,246	3	223,207
7. Experience Gain	01/01/2008	2,235,664	4	624,995
8. Method Change	01/01/2009	11,958,531	20	1,127,780
9. Recognized Portion of the 2008 ENIL	01/01/2010	6,878,112	19	663,149
10. Plan Amendment	01/01/2010	11,342,322	6	2,271,776
11. Bifurcation Base	01/01/2011	4,613,812	7	820,542
12. Bifurcation Base	01/01/2012	2,075,919	8	334,481
13. Bifurcation Base	01/01/2013	11,462,063	9	1,698,930
14. Bifurcation Base	01/01/2014	3,034,844	10	418,779
15. Experience Gain	01/01/2019	783,224	15	84,726
TOTAL CREDITS		59,070,818		$ 9,337,327
NET CHARGE		**$ 95,192,351**		**$ 11,651,374**

SECTION V – CONTRIBUTIONS

Table V-6
Accumulated Reconciliation Account and Balance Test
as of January 1, 2019

1. Amount due to Additional Interest Charges in prior years	$	0
2. Amount due to Additional Funding Charges in prior years		NA
3. Reconciliation Account at Start of Year [1. + 2.]	$	0
4. Net Outstanding Amortization Bases	$	95,192,351
5. Funding Deficiency at Start of Year	$	25,845,291
6. Unfunded Actuarial Liability at Start of Year from Funding Equation [4. – 3. + 5.]	$	121,037,642
7. Actuarial Liability at Start of Year	$	279,273,711
8. Actuarial Value of Assets at Start of Year	$	158,236,069
9. Unfunded Actuarial Liability at Start of Year from Liability Calculation [7. – 8., Limited to Zero]	$	121,037,642

The Fund passes the Balance Test because line 6. equals line 9.

SECTION V – CONTRIBUTIONS

Table V-7
Development of Full Funding Limitation
for Plan Year Starting January 1, 2019

	Minimum	Maximum
1. Entry Age Actuarial Liability Calculation		
a. Actuarial Liability	$ 279,273,711	$ 279,273,711
b. Normal Cost with Expenses	1,061,243	1,061,243
c. Lesser of Market Value and Actuarial Value of Assets	153,296,273	153,296,273
d. Credit Balance/(Funding Deficiency) at Start of Year	(25,845,291)	0
e. Actuarial Liability Full Funding Limit [a. + b. – c. + d.] x 1.08, limited to zero	$ 109,288,861	$ 137,201,775
2. Full Funding Limit Overide (RPA 1994)		
Interest Rate used to Calculate Current Liability	3.06%	3.06%
a. RPA 1994 Current Liabilty at Start of Year	$ 474,757,777	$ 474,757,777
b. Present Value of Benefits Estimated to Accrue during Year	2,514,056	2,514,056
c. Expected Benefit Payments	22,188,869	22,188,869
d. Net Interest on a., b. and c. at Current Liability Interest Rate	14,267,586	14,267,586
e. Expected Current Liability at End of Year, [a. + b. – c. + d.]	469,350,550	469,350,550
f. 90% of e.	422,415,495	422,415,495
g. Actuarial Value of Assets at Start of Year	158,236,069	158,236,069
h. Expected Expenses	353,198	353,198
i. Net Interest on c., g. and h. at Valuation Interest Rate	11,760,150	11,760,150
j. Estimated Value of Assets, [g. – c. – h. + i.]	147,454,152	147,454,152
k. RPA 1994 Full Funding Limit Override	$ 274,961,343	$ 274,961,343
3. Full Funding Limitation at End of Year, greater of 1e. and 2k.	$ 274,961,343	$ 274,961,343

SECTION VI – WITHDRAWAL LIABILITY

The Multi-Employer Pension Plan Amendments Act of 1980 (MPPAA) provides that a contributing employer who withdraws from a multi-employer pension plan, either partially or totally, will be liable to the fund for a share of the fund's Unfunded Vested Benefits (UVB) that exist as of the end of the plan year prior to the year in which the withdrawal occurs. The UVB is apportioned using the Presumptive Method as described in ERISA §4211(b)(1).

Vested Benefits are the benefits that the Fund cannot take away from participants. Vested Benefits belong to two groups of participants: those former employees who have retired and are currently receiving retirement benefits; and those employees and former employees who have not yet retired, but who have accumulated enough service to earn the right to receive a benefit when they do retire even if their employment is terminated prior to retirement.

The total liability for all Vested Benefits as of December 31, 2018 is $272,863,143. This liability has been determined using the actuarial assumptions shown in Appendix C for funding purposes. As of December 31, 2018, the Market Value of Assets applicable to the use of the Presumptive Method of allocating UVB was $153,296,273. Because the present value of Vested Benefits exceeds the assets of the Fund, there are Unfunded Vested Benefits as of December 31, 2018. Consequently, a participating employer who withdraws from the Fund during the plan year beginning January 1, 2019 may have a Withdrawal Liability, which will be based on its share of the Unfunded Vested Benefits.

In addition, a withdrawing employer will be assessed a portion of the Affected Benefit liability in accordance with the provisions of the Pension Protection Act. The Affected Benefit liability arose when the Fund removed certain Adjustable Benefits effective January 1, 2010. The unamortized balance of the Affected Benefit liability at December 31, 2018 is $202,593.

SECTION VII – FASB ASC 960 DISCLOSURES

Table VII-1
Present Value of Accumulated Benefits as of January 1, 2019
in Accordance with FASB ASC 960

		Amounts	Counts
1. Actuarial Present Value of Vested Benefits			
For Retirees and Beneficiaries	$	151,637,525	1,001
Terminated Vesteds		80,586,231	738
Active Participants		40,639,387	258
Total Vested Benefits	$	272,863,143	1,997
2. Non-vested Benefits	$	2,378,946	43
3. Present Value of Expected Administrative Expenses[1]	$	4,597,691	
4. Accumulated Benefits	$	279,839,780	2,040
5. Market Value of Assets	$	153,296,273	
6. Funded Ratios			
Vested Benefits		56%	
Accumulated Benefits		55%	

Reconciliation of Present Value of Accumulated Benefits

1. Actuarial Present Value at Start of Prior Year	$	274,037,389
2. Increase (Decrease) over Prior Year due to:		
Benefit Accruals	$	1,163,200
Benefit Payments		(19,391,415)
Increase for Interest		21,255,313
Liability Experience (Gains)/Losses		(1,822,398)
Changes in Assumptions		0
Plan Amendments		0
Total	$	1,204,700
3. Actuarial Present Value at End of Prior Year (w/o Administrative Expenses)	$	275,242,089
4. Present Value of Expected Administrative Expenses[1]	$	4,597,691
5. Actuarial Present Value at End of Prior Year (w/ Administrative Expenses)	$	279,839,780

[1] The present value of expected administrative expenses is equal to 1.67% of the Accrued Liability.

APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided by Associated Administrators LLC (AA). Cheiron did not audit any of the data; however, the data was reviewed to ensure that it complies with generally accepted actuarial standards. The data is as of January 1, 2019.

The following is a list of data charts contained in this section:

- Age/Service Distribution for Active Participants
- Counts and Average Benefit Amount by Age for Retirees, Beneficiaries, and Disabled Participants
- Counts and Average Benefit Amount by Age for Terminated Vested Participants

Table A-1
Age/Service Distribution of Active Participants as of January 1, 2019

	COMPLETED YEARS OF CREDITED SERVICE							
AGE	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total
Under 25	5	0	0	0	0	0	0	5
25-29	8	4	0	0	0	0	0	12
30-34	14	13	7	0	0	0	0	34
35-39	9	8	10	8	1	0	0	36
40-44	4	10	10	9	4	0	0	37
45-49	1	7	10	9	11	2	0	40
50-54	2	4	8	10	11	9	10	54
55-59	3	5	10	13	7	10	12	60
60-64	1	1	3	3	5	3	2	18
65 & Up	1	1	2	0	0	0	1	5
Total	48	53	60	52	39	24	25	**301**

Average Age = **47.1**   Average Service = **15.0**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-2
Age/Benefit Distribution of Inactive Participants as of January 1, 2019

PENSIONERS AND BENEFICIARIES RECEIVING BENEFITS

	Normal, Early Deferred Vested Retirements		Surviving Spouses and Beneficiaries Receiving Benefits		Total	
Age	**Number**	**Monthly Benefit**	**Number**	**Monthly Benefit**	**Number**	**Monthly Benefit**
Under 55	12	$ 51,495	2	$ 952	14	$ 52,447
55-59	58	227,415	8	4,992	66	232,407
60-64	227	570,230	18	9,300	245	579,530
65-69	196	333,760	24	10,965	220	344,725
70-74	153	184,080	27	16,929	180	201,009
75-79	135	142,875	24	8,371	159	151,246
80 & Over	90	59,038	27	8,585	117	67,623
Total	871	$ 1,568,893	130	$ 60,094	**1,001**	**$ 1,628,987**

DEFERRED VESTED PARTICIPANTS AND SURVIVING SPOUSES ENTITLED TO FUTURE BENEFITS

Age	**Number**	**Monthly Benefit Payable at Normal Retirement Date**
Under 45	126	$ 132,360
45-49	115	181,947
50-54	209	436,626
55-59	213	426,063
60-64	50	51,944
65 & Over	25	12,187
Total	738	$ 1,241,127

APPENDIX A – MEMBERSHIP INFORMATION

Table A-3
Participant Reconciliation from January 1, 2018 to January 1, 2019

	Actives	Terminated Vested	Deferred Spouses	Retired	QDROs	Spouses	Total
1. **January 1, 2018 Valuation**	**368**	**722**	**14**	**830**	**23**	**125**	**2,082**
2. Additions							
a. New entrants	15						15
b. New spouse							0
c. New QDRO							0
d. Pickups		3				2	5
Total Additions	**15**	**3**	**0**	**0**	**0**	**2**	**20**
3. Reductions							
a. Terminated - not vested	(29)						(29)
b. Non-Participating					(1)		(1)
c. Lump sum							0
d. Deaths without beneficiary		(5)		(28)		(2)	(35)
e. Data corrections, missing							0
Total Reductions	**(29)**	**(5)**	**0**	**(28)**	**(1)**	**(2)**	**(65)**
4. Changes in status							
a. Terminated - vested	(44)	44					0
b. Returned to work	8	(8)					0
c. Retired	(17)	(29)		46			0
d. Died with beneficiary		(5)	2	(2)		5	0
e. Data corrections				3			3
Total Changes	**(53)**	**2**	**2**	**47**	**0**	**5**	**3**
5. **January 1, 2019 Valuation**	**301**	**722**	**16**	**849**	**22**	**130**	**2,040**

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

This summary of plan provisions provides an overview of the major provisions of the pension fund used in the actuarial valuation. It is not intended to replace the more precise language of the plan document and is not to be relied upon for calculating participant benefits.

1. Eligibility

Any employee on whose behalf contributions are made to the pension plan is eligible to participate in the Fund.

2. Normal Retirement

Eligibility: Age 60 with five years of service.

For service after the adoption or imposition of a Rehabilitation Benefit Schedule, the normal retirement age has been increased to age 62 with five years of service.

Amount: The greater of the Flat Benefit or the Percentage of Contributions benefit given below.

Flat Benefit

Employer's Contribution			
At Least	But Less Than	First 60 Months	Later Months
---*	$.15	$100*	$ 55
$.15	$.25	$200	$110
$.25	$.35	$300	$165
$.35	$.45	$400	$220
$.45	---	$500	$275

* This benefit amount is applicable only if the employer's effective date is after January 1, 1981. If the employer's effective date is prior to January 1, 1981, the minimum flat benefit amount for contribution rates less than $0.25 is the $200/$110 amount.

The flat benefit amounts are reduced 5% for each year of service for benefit accrual less than 20. Increases in the level of monthly benefits are made when the employer's contribution rate is increased after the employer's effective date, subject to certain limitations.

Percentage of Contributions Benefit

For service prior to the adoption or imposition of a Rehabilitation Benefit Schedule:

A monthly life annuity reducing to 55% of the original amount after 60 months, equal to (a) 4.17% of all contributions required to be made on a participant's behalf on and after January 1, 1978 plus (b) X% of all contributions required to be made on a participant's behalf

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

prior to January 1, 1978, where "X" is determined from the following table:

Participant's Age on January 1, 1978	X%	Participant's Age on January 1, 1978	X%
60 or over	12.0	49	7.6
59	11.6	48	7.2
58	11.2	47	6.8
57	10.8	46	6.4
56	10.4	45	6.0
55	10.0	44	5.6
54	9.6	43	5.2
53	9.2	42	4.8
52	8.8	41	4.4
51	8.4	40 and under	4.17
50	8.0		

For those employers who elected through a collective bargaining agreement to make a supplemental contribution beginning January 1, 1998, the monthly life annuity above reduces to 55% of the original amount after 96 months instead of 60.

Effective for participants who earned an hour of service on or after January 1, 1999, 24 months is added to the number of months described above (i.e., 60 months and 96 months for a total of 84 and 120 months, respectively).

For service after the adoption or imposition of a Rehabilitation Benefit Schedule:

Preferred Schedule: 2.0% of all contributions required to be made on a participant's behalf on and after the date of adoption of the Preferred Schedule, reducing to 1.0% after the pension has been in effect for 60, 84, 96, or 120 months.

Default Schedule: 1.0% of all contributions required to be made on a participant's behalf on and after the date of adoption or imposition of the Default Schedule.

3. Early Retirement Benefit

Eligibility: At least age 55 and has 20 continuous years of service for benefit accrual; and has ten continuous years of participation.

Amount: Actuarial equivalent of the accrued normal retirement benefit.

Eligibility: On completion of 30 years of service with the Fund.

Amount: Accrued normal retirement benefit payable immediately.

4. Postponed Retirement Benefit

<u>Participant Entitled to Flat Benefit</u>

A participant who elects to postpone his retirement beyond his normal retirement date is entitled to a postponed retirement benefit equal to the flat benefit increased by 5%

for each year of service for benefit accrual after his normal retirement date, provided that the years of service for benefit accrual do not exceed 25, in the aggregate.

Participant Entitled to Percentage

A participant who elects to postpone his retirement of contributions benefit beyond his normal retirement date is entitled to a postponed retirement benefit, in lieu of his normal retirement benefit, in the amount of the normal retirement benefit calculated as if he had reached his normal retirement date on the day he actually retires.

5. Termination Benefit

Eligibility: Five credited years of service for vesting.

Amount: A deferred annuity in the amount of the participant's accrued normal benefit at termination commencing at the participant's normal retirement age.

6. Disability Retirement

Eligibility: At least age 45, and has at least 15 continuous years of service for benefit accrual, and has at least five continuous years of participation, and has at least 40 weeks' payments into the trust fund by an employer, and be totally and permanently disabled for at least 6 months as determined by trustees.

Amount: A lump sum of $2.00 per paid week up to a maximum of $2,000.

Eliminated after the adoption or imposition of a Rehabilitation Benefit Schedule.

In addition, the participant is eligible for the termination benefit under the plan.

7. Death Benefits

Pre-Retirement Lump Sum Death Benefit

Eligibility: Five continuous years of participation in the pension plan, and has had at least 40 weeks' payments into the trust fund by an employer.

Amount: $2.00 per paid week up to a maximum of $2,000 reduced by any disability benefits paid.

Eliminated after the adoption or imposition of a Rehabilitation Benefit Schedule.

Pre-Retirement Spouse's Pension

Eligibility: Available only to married participants who are eligible for a termination benefit, including vested terminated participants.

Amount: A life annuity to the participant's lawful spouse in the amount of the surviving spouse's benefit that would have been provided under the qualified joint and survivor annuity payable at what would have been the participant's earliest retirement date.

The pre-retirement spouse's benefit will be paid in addition to the lump sum death benefit.

8. Normal Form of Pension

For participants who are married as of the normal retirement date, the normal retirement benefit is automatically payable as a joint and survivor annuity actuarially equivalent to the above benefit. The normal form of pension payable to a married employee who does not elect otherwise will be an actuarially reduced pension on the Joint and 50% Survivor basis.

9. Effective Date of Plan

August 15, 1965. Restated as of January 1, 2002.

10. Last Amended

Restated as of January 1, 2009 and executed on December 17, 2009. The Rehabilitation Plan was last amended in 2014 to adopt reasonable measures to forestall insolvency.

11. Contributions

Employee: None permitted or required.

Employer: On an hourly or weekly basis, on behalf of participating employees, as specified in the applicable collective bargaining agreement.

12. Changes since Last Valuation

None.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Rates of Investment Return

8.00% for funding and disclosure purposes.

3.06% for determining RPA ’94 Current Liability.

This interest rate is the top of the corridor established by law.

All investment returns are net of investment expenses.

2. Rates of Mortality

RP 2000 Mortality Table with blue-collar adjustment and Scale AA generational mortality improvements. For Current Liability purposes, the 2019 Static Mortality Table as prescribed under IRS Regulations.

3. Rates of Turnover

Double the combination of Sarason’s Advanced Pension Tables. Sample rates:

Age	Rate
20	24.77%
22	22.62
24	20.47
25	19.40
26	18.02
28	15.25
30	12.49
35	8.21
40	5.24
45	2.57
50	0.00

4. Rates of Retirement

Age	Less than 30 Years of Service	30 Years of Service	Over 30 Years of Service
51 – 59	0%	50%	10%
60 and over	100%	100%	100%

5. Rates of Disability

None assumed.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

6. Marriage Rates

Percentage Married: Males – 80%
Females – 80%

Age Differences: Males are assumed to be three years older than spouse.

7. Administrative Expenses

$353,198 payable at the beginning of the year. Projected expenses incorporate an expense inflation assumption of 3% per year.

For financial disclosure under FASB ASC 960, the present value of future administrative expense is 1.67% of accrued liability. This amount is based on future projected cash flows of $ $173.14 per participant, mid-year, that increase 3% per year for inflation.

8. Active Participants

All non-retired participants who have hours worked during the plan year ending December 31, 2018.

9. Future Hours Worked By Active Participants

Each active participant will work average annual hours worked in the past three years, excluding the year of entry. No participant is assumed to work less than 870 hours per year.

10. Contribution Rate Used for Determination of Minimum Flat Benefit

The contribution rate in effect on January 1, 2019.

11. Contribution Rate Used for Determination of Percentage of Contributions Benefit

The contribution rate in effect on January 1, 2019.

12. Participant Data

This report is based upon employee data furnished by the Fund Administrator. All non-retired participants who have hours worked during the plan year ending December 31, 2018 are assumed to be active participants as of January 1, 2019 unless identified as having been terminated.

13. Assets

Provided by the independent auditors' report as of December 31, 2018.

The Actuarial Value of Assets is based on the market value with an adjustment to smooth appreciation or depreciation in the market value over the past five years.

80% of the net appreciation or depreciation for the most recently completed plan year is removed from the value of the assets, 60% of the appreciation or depreciation

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

for the year prior to that is removed, etc., until the fifth year prior to this plan year for which none of the appreciation or depreciation is removed. The actuarial value of assets is adjusted, if necessary, to be within 80% to 120% of the market value of the assets.

14. Rehabilitation Plan Benefit Schedule

In preparing our report and valuation results, all participating employers were valued under the Preferred Schedule as of January 1, 2019.

15. Choice of Assumptions

Economic: The expected investment return was chosen by comparing long-term real portfolio returns with inflation expectations. For a portfolio weighted 60% in US Large Cap equity and 40% in investment grade bonds, the 25-year return ending on the valuation date was 8.26% or a return in excess of inflation of approximately 6%. The Fund's investments are invested more diversely than the model portfolio in expectation of generating higher returns but today's inflation targets adopted by the Federal Reserve are lower than the experience over the last 25 years. A long-term rate return of a little over 8% would be indicated by history and Fed policy.

Demographic: The demographic assumptions were last changed with the 2012 valuation. The gains and losses from demographic experience have been minor since then with the exception of a large number of actives becoming terminated vested due to their employer withdrawing from the Fund, which is not part of a demographic assumption set. An experience study will be performed in conjunction with the 2020 valuation.

16. Changes in Assumptions since Last Valuation

For funding calculations, the administrative expense assumption was changed from $358,623 to $353,198 to better reflect recent experience.

For financial disclosure under FASB Topic ASC 960, the present value of future administrative expense is based on future mid-year cash flows of $ $173.14 per participant that increase 3% per year for inflation. Last year we used $172.25 per participant.

The RPA '94 Current Liability interest rate was changed from 2.98% to 3.06% and the RPA '94 Current Liability mortality table was changed from the IRS 2018 Static Mortality Table to the IRS 2019 Static Mortality Table to comply with appropriate guidance.

B. Actuarial Methods

1. Asset Valuation Method

The Actuarial Value of Assets is determined in accordance with Section 3.16 of Revenue Procedure 2000-40 using a five-year smoothing period. Specifically, the actuarial value of assets as of January 1, 2006 is set equal to the market value of assets. For

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

each subsequent plan year, the actuarial value shall be the market value minus a decreasing fraction (4/5, 3/5, 2/5, 1/5) of each gain or loss for each of the preceding four plan years except for 2008 market losses which are recognized at 10% a year due to funding relief. Gains or losses prior to January 1, 2006 are ignored.

The resulting actuarial value of assets is then limited to be no greater than 120% and no less than 80% of the market value of assets on the valuation date.

2. Funding Method: Entry Age Normal Cost Method

Under the Entry Age Normal Cost Method, the individual Entry Age Normal cost is determined for each participant by calculating the level annual contribution required to fund that individual's expected benefits based on the current plan provisions over the participant's expected active working lifetime with the Fund at entry.

At the valuation date, the present value of future normal cost is calculated for each individual participant by multiplying the Entry Age Normal cost by the present value of the participant's expected future active working lifetime with the Fund. The cost for each participant is then summed to yield the present value of future normal costs.

The excess of the present value of future benefits for all individuals at the valuation date over the present value of future normal costs is called the Actuarial Liability, or past service liability.

The excess, if any, of the actuarial liability over the actuarial value of assets is known as the unfunded accrued liability. If the actuarial value of assets exceeds the actuarial liability, the Fund may have a surplus.

3. PRA 2010 Funding Relief

The Fund's Board of Trustees elected funding relief under §431(b)(8) of the Code and §304(b)(8) of ERISA, specifically:

- The "special amortization rule," which allows the Fund's investment losses for the plan year ended December 31, 2008 be separately amortized over 29 years.

4. Changes in Actuarial Methods Since Last Valuation

None.

CHEIRON

Classic Values, Innovative Advice

Classic Values, Innovative Advice

Warehouse Employees Union Local No. 730 Pension Trust

Actuarial Valuation Report as of January 1, 2018

Produced by Cheiron

January 2019

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January 31, 2019

Warehouse Employees Union
Local No. 730 Pension Trust
911 Ridgebrook Road
Sparks, Maryland 22102

Dear Trustees:

At your request, we have performed the January 1, 2018 Actuarial Valuation of the Warehouse Employees Union Local No. 730 Pension Trust (the "Fund"). This report contains information on the Fund's assets and liabilities and discloses contribution levels, including the minimum required amount as mandated by Federal law. This report is for the use of the Board of Trustees and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

Your attention is called to the introductory section in which we refer to the general approach employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions on which our findings are based. Those comments are the basis for our certification that this report is complete to the best of our knowledge and belief. The results of this report are only applicable to the 2018 Plan Year. Future results may differ significantly from the current plan year presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

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

This report was prepared exclusively for the Fund for the purposes described herein. Other users of this valuation report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other users.

Sincerely,

[redacted], FSA, MAAA, EA
Principal Consulting Actuary

[redacted]A, EA
Consulting Actuary

FOREWORD

Cheiron has performed the Actuarial Valuation of the Warehouse Employees Union Local No. 730 Pension Trust as of January 1, 2018. The purpose of this report is to:

1) **Measure and disclose**, as of the valuation date, the financial condition of the Fund;

2) **Provide specific information** and documentation required by the Federal Government and the auditors of the Fund; and

3) **Review past and expected trends** in the financial conditions of the Fund.

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

Section I presents a summary of the key valuation results, general comments about the results, a review of historical trends including assets versus liabilities, minimum funding, participation and cash flows, and projection scenarios.

Section II contains exhibits relating to the valuation of assets.

Section III shows the various measures of liabilities.

Section IV shows the development of the minimum and maximum contributions.

Section V provides the calculation of unfunded vested benefits for withdrawal liability purposes as of January 1, 2018 that would be allocated to employers that withdrew during the 2018 calendar year.

Section VI provides the FASB Accounting Standard Codification (ASC) 960 Disclosure required by the Fund's auditor.

The appendices to this report contain a summary of the Fund's membership at the valuation date, a summary of the major provisions of the Fund, and the actuarial methods and assumptions used in the valuation.

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

The actuarial assumptions reflect our understanding of the likely future experience of the Fund and the assumptions, taken individually, represent our best estimate for the future experience of the Fund. Future experience may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

Please note this valuation was prepared using census data and financial information as of the valuation date, January 1, 2018 and events following that date are not reflected.

SECTION I – SUMMARY

The table below sets out the principal results of this year's valuation and compares them to last year's results. Both years reflect the Board adopted funding relief under Internal Revenue Code Sections 431(d) and 431(b)(8).

Table I-1
Summary of Principal Results

	January 1, 2017	January 1, 2018	Change
Participant Counts			
Actives	379	368	(2.9%)
Terminated Vesteds	772	736	(4.7%)
In Pay Status	946	978	3.4%
Total	2,097	2,082	(0.7%)
Financial Information			
Market Value of Assets	$ 157,775,289	$ 167,271,666	6.0%
Actuarial Value of Assets	166,069,842	160,515,367	(3.3%)
AVA as a % of MVA	105.3%	96.0%	
Entry Age Actuarial Liability	$ 276,068,525	$ 278,076,443	0.7%
Surplus (Unfunded Actuarial Liability)	(109,998,683)	(117,561,076)	N/A
Present Value of Accrued Benefits/Accrued Liability	$ 272,099,196	$ 274,037,389	0.7%
Accrued Benefit Surplus (Unfunded)	(106,029,354)	(113,522,022)	N/A
Accrued Benefit Funding Ratio (AVA Basis)	61.0%	58.6%	N/A
Present Value of Vested Benefits	$ 268,691,744	$ 270,920,799	0.8%
Vested Benefit Surplus (Unfunded)	(110,916,455)	(103,649,133)	N/A
Vested Benefit Funding Ratio (MVA Basis)	58.7%	61.7%	N/A
Contributions and Cash Flows			
ERISA Credit Balance (Beginning of Year)	$ (7,181,407)	$ (16,958,696)	136.1%
Employer Contributions (actual/*estimated*)	4,304,754	*4,484,871*	4.2%
ERISA Minimum Funding before Credit Balance	13,676,408	13,893,560	1.6%
Prior Year Benefit Payouts	$ 17,357,541	$ 18,442,083	6.2%
Prior Year Administrative Expenses	308,693	356,261	15.4%
Prior Year Total Investment Income (Net)	11,065,177	23,989,967	N/A

SECTION I – SUMMARY

The following is an analysis of the Fund's recent past performance followed by historical results for the last ten years. After that, projections of future results are shown.

General Comments

Investment and liability experience and their effect on future costs traditionally have been the focus of year-to-year analyses.

- The Market Value of Assets (MVA) returned 15.94% during the year ending December 31, 2017. The total actuarial investment gain (the difference between actual and expected returns) was $11.9 million.
- For long-term planning and especially for minimum funding requirements, the Fund develops an Actuarial Value of Assets (AVA) to smooth investment gains and losses over time. Due to the continued phase-in of historical investment gains and losses of the past five years, the rate of return on the AVA was 5.61%, resulting in an actuarial loss of $3.8 million.
- For minimum funding requirements, the Fund's actuarial liability is determined using the Entry Age Normal Cost Method. Although the liability increased by $2.0 million, on a positive note there was a liability experience gain of $1.8 million.
- The end of year minimum required contribution, before taking into account the credit balance, increased from $13.7 million to $13.9 million. The increase was mostly attributable to the $3.8 million AVA loss even though it was partially offset by the $1.8 million liability gain. This added an annual amortization charge of $0.2 million.
- During the 2017 Plan Year, the Fund's funding deficiency increased from $7.2 million to $17.0 million. Due to the Pension Protection Act of 2006 (PPA) no excise tax is due provided the Fund has a valid Rehabilitation Plan and all employers are complying with it.

PPA added a significant layer of new considerations related to the Fund's PPA funded status.

- For 2018, the Fund was certified as "Critical and Declining" under PPA as amended. This was caused by the current funding deficiencies and the projected insolvency within the next 14 years. The PPA status is re-determined annually.
- The Fund's funding ratio for PPA purposes is based on the accrued liability determined using the Unit Credit Cost Method. It decreased from 61.0% to 58.6% primarily because contributions are less than the benefit payments and expenses, leading to a negative cash flow of approximately 9% of the assets.
- Despite the $1.8 million liability gain, for funding purposes, the Fund's accrued liabilities used in the PPA funding ratio grew by $1.9 million during the 2017 Plan Year.

SECTION I – SUMMARY

- The Board of Trustees of the Fund first adopted a Rehabilitation Plan (RP) on November 26, 2009. The Rehabilitation Plan is applicable for collective bargaining agreements and participation agreements renewed or extended after December 25, 2009. The Fund's Rehabilitation Period began on January 1, 2012.

  After the initial adoption of the Rehabilitation Plan, subsequent employer withdrawals resulted in a deterioration of the funding of the plan. Consequently, in 2014 the Trustees updated the Rehabilitation and adopted a "reasonable measures to forestall insolvency" approach for PPA compliance. As a result of this update and annual reviews of the RP in light of then current conditions, all future contracts must include 4.9% annually compounded contribution increases.

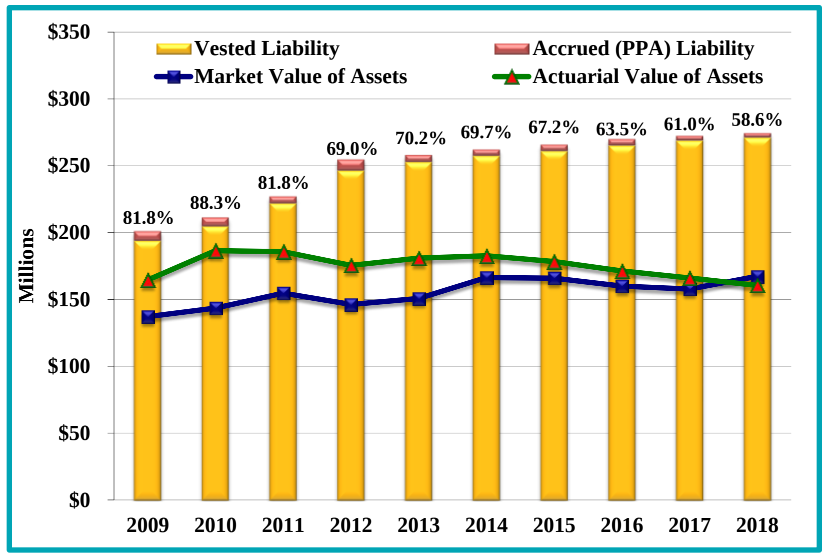
- In February 2010, the Trustees took a five-year extension of the Fund's amortization bases as of January 1, 2009 under Section 431(d) of the Code. The net impact on the Funding Standard Account is an $18.6 million increase in the January 1, 2018 credit balance from what it would be without the Section 431(d) extension. Unless indicated otherwise, throughout this report, the term credit balance refers to the credit balance reflecting the 431(d) extension.

- The Unfunded Vested Benefits (UVB) on a market value basis decreased from $110.9 million to $103.6 million. Under the provisions of the Multiemployer Pension Plan Amendment Act of 1980 (MPPAA) if the vested benefit liabilities exceed fund assets, an assessment of withdrawal liability may be made to any employer withdrawing from the Fund.

Historical Summary

On the following pages, we present a series of charts which display key results from the prior ten actuarial valuations.

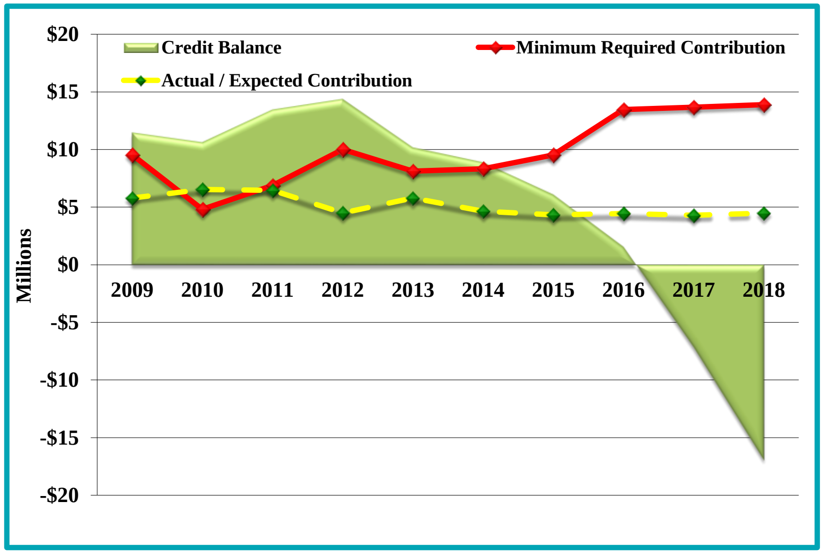
Assets & Liabilities: The following graph compares historical assets and liabilities. The gold bars represent the present value of vested benefits while the red bars add the additional non-vested benefits making up the Accrued Liability. The blue line is the Market Value of Assets and the green line is the Actuarial Value of Assets. The percentages shown on top of the bars represent the Fund's PPA funding ratio (AVA as a percentage of Accrued Liabilities).



Minimum Funding: The next graph shows the Credit Balance (green area) which is the accumulated contributions in excess

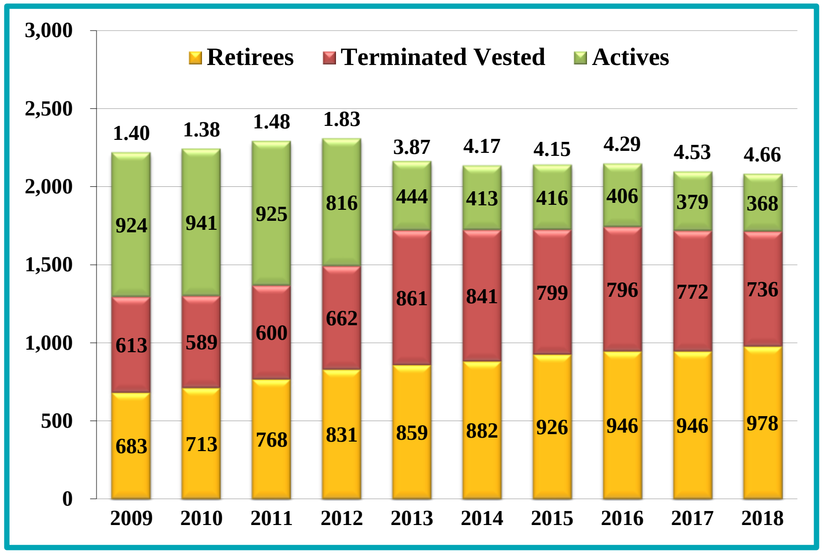
SECTION I – SUMMARY

of the Minimum Required Contribution before the Credit Balance (red line), and the Actual Contributions (yellow line).



On average, the contributions for the last ten years have been significantly lower than the minimum required contribution. This has caused a steep decline in the credit balance since 2012 leading to a funding deficiency beginning in 2017. Contributions, including expected withdrawal liability payments, are expected to again fall short of the minimum required contribution next year.

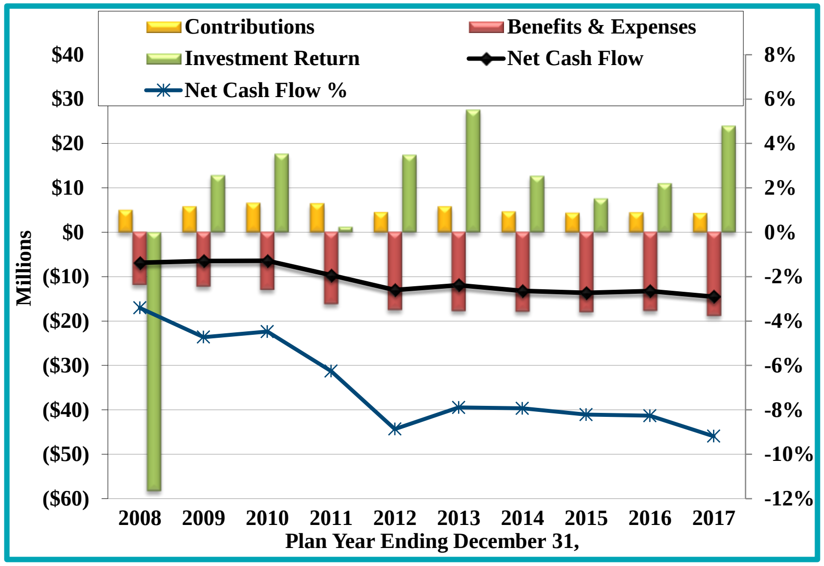
Participation: The following graph shows the participants of the Fund at successive valuation dates. The numbers above each bar represent the number of inactive members to active members (i.e., support ratio) at each valuation date. The support ratio increased significantly as of January 1, 2013 due to the withdrawal of two participating employers (Jessup and McKesson) during 2012.



Further declines in active membership will reduce future contributions and increase the negative cash flow, which will put more pressure on the overall plan funding.

Cash Flow: The following graph shows the Fund's cash flow, contributions less benefit payments and expenses, at successive valuation dates. This is a critical measure, as it reflects the ability to have funds available to meet benefit payments without having to make difficult investment decisions, especially during volatile markets.

The main consequence for a fund with negative cash flow is that the impact of market fluctuations will be more severe. This is because assets will have to be used to pay benefits in down markets. This means there will be less principal left to benefit from later favorable investment experience.

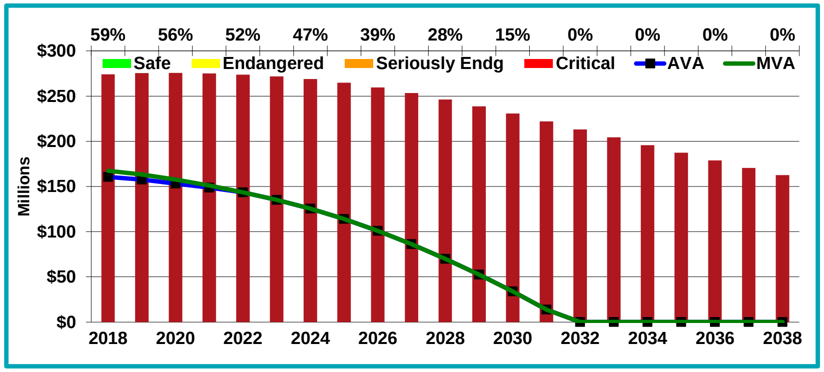


Future Outlook

In this section we move away from viewing a single year's results or historical trends and focus on the future of the Fund. In light of the Fund's "Critical and Declining" classification, this future outlook focuses on the projection of assets.

The following projection assumes participation remains constant, contributions increase 4.9% annually, the expected withdrawal liability payments from McKesson Drug continue, and all of the assumptions set out in Appendix C are realized including the return of 8% per year.

Under this scenario, the projection shows the Fund will exhaust its assets during 2031. This is one year later than last year's projection showed. This improvement is mainly the result of the return on the market value of assets during 2017 exceeding the expected 8%. In addition to the excess asset, returns there were more deaths than expected and fewer than expected retirements, both positive results.



SECTION II – ASSETS

Assets at Market Value

Market values represent "snap-shot" or "cash-out" values, which provide the principal basis for measuring financial performance from one year to the next.

Table II-1
Statement of Assets at Market Value, December 31

	2016	2017
Invested Assets		
Common Stocks	$ 54,443,612	$ 46,974,592
U.S. Government Agencies Notes and Bonds	2,017,860	1,769,586
Corporate Notes and Bonds	3,286,055	3,918,005
Limited Partnerships & DFEs	76,787,322	85,515,091
Common Collective Trusts	16,693,820	25,753,271
Temporary Investments	2,864,235	1,521,708
Other (Fund of Funds)	201,336	101,069
Total Investments:	$ 156,294,240	$ 165,553,322
Other Assets		
Employer Contributions Receivable	379,395	340,118
Accrued Interest and Dividends	95,140	79,748
Other Receivables	3,975	1,996
Prepaid Expenses	19,227	20,813
Cash	1,485,120	1,566,858
Accounts Payable	(501,808)	(291,189)
Total Non-Invested Assets:	$ 1,481,049	$ 1,718,344
Net Assets Available for Benefits	$ 157,775,289	$ 167,271,666

The table above shows the market value of assets taken into account for funding purposes. These values exclude receivable withdrawal liability payments because they are not "receivable" as defined by the IRS. At December 31, 2017, the amount including this receivable shown in the audited financial statement was $173,515,750.

Changes in Market Value

The components of asset change are:

- Contributions
- Benefit payments
- Expenses
- Investment income (realized and unrealized)

The specific changes during 2017 are presented below.

Table II-2 *
Changes in Market Values

Value of Assets - January 1, 2017	$ 157,775,289
Employer Contributions	3,641,080
Withdrawal Liability Payments	663,674
Investment Return (Gross)	25,682,718
Benefit Payments	(18,442,083)
Administrative Expenses	(356,261)
Investment Expenses	(1,692,751)
Value of Assets - January 1, 2018	$ 167,271,666

* On this table $1,500 of other income is classed as investment income.

SECTION II – ASSETS

Investment Performance

The following table calculates the actuarial investment gain/loss and the return for the plan year on a market value basis. The return is an appropriate measure for comparing the actual asset performance to the long-term 8% assumption.

Table II-3
Change in Market Value of Assets

Item	Market Value
January 1, 2017 value	$ 157,775,289
2017 Employer Contributions	3,641,080
2017 Withdrawal Liability Payments	663,674
2017 Benefit Payments	(18,442,083)
Actual Administrative Expenses	(356,261)
Expected Investment Earnings (8%)	12,053,433
Expected Value December 31, 2017	$ 155,335,132
Investment Gain / (Loss)	11,936,534
January 1, 2018 value	$ 167,271,666
Investment Return	15.94%

Assets at Actuarial Value

For long-term planning, actuaries developed an actuarial value of assets using smoothing techniques to mitigate the effects of short-term volatility exhibited by the capital markets. The asset valuation method, adopted with the 2007 valuation, phases in actuarial investment gains and losses over five years (ten years for the 2008 loss). The actuarial value of assets is then constrained, if necessary, so that it is not more than 120% of the market value and is not less than 80% of the market value. The asset valuation method is described more fully in Appendix C.

The table below shows the development of the actuarial value of assets.

Table II-4
Development of Actuarial Value of Assets

Market Value of Assets as of January 1, 2018				$ 167,271,666
Plan Year	Investment Gains / (Losses)	Percent Recognized	Percent Deferred	Amount Deferred
12/31/2008	(74,150,277)	100%	0%	0
12/31/2013	15,983,419	100%	0%	0
12/31/2014	(78,622)	80%	20%	(15,724)
12/31/2015	(5,127,301)	60%	40%	(2,050,920)
12/31/2016	(1,210,474)	40%	60%	(726,284)
12/31/2017	11,936,534	20%	80%	9,549,227
Total				$ 6,756,299
Preliminary Actuarial Value of Assets January 1, 2018				$ 160,515,367
120% of MV, upper limit for actuarial value				200,725,999
80% of MV, lower limit for actuarial value				133,817,333
Actuarial Value of Assets January 1, 2018				$ 160,515,367
- as a percent of Market Value of Assets				96.0%

SECTION II – ASSETS

Asset Gain/(Loss)

The following table calculates the investment gain/loss and the return for the plan year on an actuarial value basis. This gain/loss is one component of the Fund's overall actuarial experience gain/loss, which is recognized for minimum funding requirements.

Over 2017, the Fund's assets at actuarial value produced an actuarial loss of $3,787,217.

Table II-5
Change in Actuarial Value of Assets

Item		Actuarial Value
January 1, 2017 value	$	166,069,842
2017 Employer Contributions		3,641,080
2017 Withdrawal Liability Payments		663,674
2017 Benefit Payments		(18,442,083)
Expected Administrative Expenses		(334,170)
Expected Investment Earnings (8%)		12,704,241
Expected Value December 31, 2017	$	164,302,584
Investment Gain / (Loss)		(3,787,217)
January 1, 2018 value	$	160,515,367
Investment Return		5.61%

SECTION III – LIABILITIES

In this section, we present detailed information on the Fund's liabilities including:

- **Disclosure** of the Fund's liabilities at January 1, 2017 and January 1, 2018; and
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which they are used.

- **Actuarial Liabilities:** Used in determining minimum funding requirements, maximum tax-deductible contributions, and long-term funding targets, this amount is calculated using the **Entry Age Normal Cost Method.**
- **Accrued Liabilities:** Used for communicating the current levels of liabilities, these liabilities represent the total amount of money needed to fully pay off all future obligations of the Fund using funding assumptions and assuming no further accrual of benefits. They are determined using the **Unit Credit Cost Method**.

  These liabilities are used for determining funded status under PPA. The law requires them to be compared to the actuarial value of assets to measure funded status. They can also be used to establish comparative benchmarks with other plans.

  The accrued liabilities must also be included in the Fund's financial statement for accounting disclosure purposes (FASB ASC Topic No. 960). However, the accounting disclosure must also include the present value of future administrative expenses. This sum is called the Present Value of Accumulated Benefits.
- **Vested Liabilities:** Used for administrative purposes in determining employer withdrawal liability, this liability represents that portion of the accrued liabilities, which are vested.
- **Current Liabilities:** Used for Federal Government compliance purposes, the calculation of this liability is defined by federal regulations and is used to determine maximum allowable tax-deductible contributions.

The table on the following page discloses each of these liabilities for the current valuation and the prior one. With respect to each disclosure, a subtraction of the appropriate value of fund assets yields, for each respective type, a **surplus or unfunded liability**.

SECTION III – LIABILITIES

Table III-1
Liabilities/Net Surplus (Unfunded)

	January 1, 2017	January 1, 2018
ACTUARIAL LIABILITY		
Active Participant Benefits	$ 51,899,712	$ 48,340,866
Retiree and Inactive Benefits	224,168,813	229,735,577
Actuarial Liability	**$ 276,068,525**	**$ 278,076,443**
Actuarial Value of Assets	166,069,842	160,515,367
Net Surplus (Unfunded)	**$ (109,998,683)**	**$ (117,561,076)**
ACCRUED LIABILITY		
Active Participant Benefits	$ 47,930,383	$ 44,301,812
Retiree and Inactive Benefits	224,168,813	229,735,577
Accrued Liability	**$ 272,099,196**	**$ 274,037,389**
Actuarial Value of Assets	166,069,842	160,515,367
Net Surplus (Unfunded)	**$ (106,029,354)**	**$ (113,522,022)**
VESTED LIABILITY		
Accrued Liability	$ 272,099,196	$ 274,037,389
Less Present Value of Non-Vested Benefits	3,407,452	3,116,590
Vested Liability	**$ 268,691,744**	**$ 270,920,799**
Actuarial Value of Assets	166,069,842	160,515,367
Net Surplus (Unfunded)	**$ (102,621,902)**	**$ (110,405,432)**
CURRENT LIABILITY (RPA 1994)		
Current Liability	**$ 474,054,870**	**$ 486,394,917**
Market Value of Assets	157,775,289	167,271,666
Net Surplus (Unfunded)	**$ (316,279,581)**	**$ (319,123,251)**

SECTION III – LIABILITIES

Allocation of Liabilities by Type

The Fund's participants may qualify for a benefit upon death, termination, and disability as well as upon retirement. The value of the liabilities arising from each of these sources is shown in the following table.

Table III-2
Allocation of Liabilities by Type

Benefit Type	Retirement	Termination	Death	Expenses	Total
Entry Age Normal Cost	$ 579,495	$ 181,680	$ 8,503	$ 358,623	$ 1,128,301
Entry Age Actuarial Liability					
Actives	$ 47,917,181	$ 149,000	$ 274,684	$ 0	$ 48,340,865
Terminated Vesteds	0	80,852,537	0	0	80,852,537
Retirees and Beneficiaries	143,253,004	0	5,630,037	0	148,883,041
Total	$ 191,170,185	$ 81,001,537	$ 5,904,721	$ 0	$ 278,076,443
Current Liability Normal Cost	$ 2,457,151	$ 261,273	$ 17,013	$ 0	$ 2,735,437
Current Liability					
Actives	$ 84,478,047	$ 3,971,567	$ 479,106	$ 0	$ 88,928,720
Terminated Vesteds	0	164,529,401	0	0	164,529,401
Retirees and Beneficiaries	224,136,670	0	8,800,126	0	232,936,796
Total	$ 308,614,717	$ 168,500,968	$ 9,279,232	$ 0	$ 486,394,917
Vested Current Liability					
Actives	$ 34,310,902	$ 49,909,187	$ 472,852	$ 0	$ 84,692,941
Terminated Vesteds	0	164,529,401	0	0	164,529,401
Retirees and Beneficiaries	224,136,670	0	8,800,126	0	232,936,796
Total	$ 258,447,572	$ 214,438,588	$ 9,272,978	$ 0	$ 482,159,138

SECTION III – LIABILITIES

Changes in Liabilities

Each of the liabilities shown in the table below is subject to change at successive valuations as the experience of the Fund varies from that assumed in the valuation. The liabilities may change for any of several reasons, including:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments
- Interest on liabilities
- Benefits paid to retirees
- Participants leaving employment at rates different from expected
- Changes in actuarial assumptions
- Changes in actuarial methods

Table III-3
Reconciliation of Liabilities

	Actuarial Liability	Accrued Liability
Liabilities as of January 1, 2017	$ 276,068,525	$ 272,099,196
Liabilities as of January 1, 2018	$ 278,076,443	$ 274,037,389
Liability Increase (Decrease)	$ 2,007,918	$ 1,938,193
Change Due due to:		
Plan Amendment	$ 0	$ 0
Assumption Change	0	0
Accrual of Benefits	809,520	1,178,147
Passage of Time (Interest less benefits paid)	2,984,669	2,696,613
Other Sources	0	0
Actuarial Liability (Gain) / Loss	(1,786,271)	(1,936,567)
Total Change	$ 2,007,918	$ 1,938,193

SECTION IV – CONTRIBUTIONS

In this section, we present detailed information on the Fund's contributions from two perspectives:

- **Actuarially determined** contributions or actuarial cost and
- **Government Limits,** which could affect the above.

Actuarial Determined Contributions

For this Fund, the cost method used to calculate the actuarially determined contribution is the **Entry Age Normal Cost Method**. The actuarially determined contribution or cost is determined in two parts.

The first part is the **Entry Age Normal Cost**. This is the level cost of providing the benefits promised by the Fund to each individual participant in service at the valuation date assuming that contributions are made over the period of the participant's working life. The normal cost includes a provision for the Fund's expenses.

The second part is an amortization payment to pay off the unfunded actuarial liability. The unfunded actuarial liability is the difference between the actuarial assets of the Fund at the valuation date and the assets the Fund should hold as determined by the actuarial cost method. The amortization payment is determined using the amortization schedule established by the IRS minimum funding rules.

Government Limits

ERISA and the IRS tax code place various limits on the contributions made to qualified pension plans. The limits impact the minimum that must be paid, the maximum that can be deducted and the timing of contributions. Pension plans are required to retain an Enrolled Actuary to report on the progress of funding through completion of Schedule MB to Form 5500 on an annual basis. The actuarially determined contribution/cost for 2018 is shown in the following table compared to the various Government Limits and the estimated employer contributions (including withdrawal liability payments).

The table below summarizes the results of the tables on the following pages. It also shows the per capita actuarially determined contribution/actuarial cost and per capita expected contribution. The cost is almost three times the expected contribution.

Table IV-1
Contributions for 2018

Actuarially Determined Contribution		
Entry Age Normal Cost	$	769,678
Administrative Expense		358,623
Amortization Payment		11,736,106
Interest to End of Year		1,029,153
Total	$	13,893,560
Government Limits		
Maximum Deductible Contribution	$	524,273,864
Minimum Required Contribution (before Credit Balance)	$	13,893,560
Funding Deficiency (with interest to End of Year)	$	18,315,392
Minimum Contribution (after Credit Balance)	$	32,208,952
Employer Contributions with Interest*	$	4,660,815
Count of Active Participants		368
Per Capita Actuarial Cost	$	37,754
Per Capita Contribution	$	12,665

* Estimated contributions of $4,484,871 (including interest to end of year)

SECTION IV – CONTRIBUTIONS

Table IV-2
Funding Standard Account for 2017 and 2018 Plan Years

	2017	2018
1. Charges For Plan Year		
a. Funding Deficiency	$ 7,181,407	$ 16,958,696
b. Normal Cost with Expenses	1,143,690	1,128,301
c. Amortization Charges	20,772,254	20,988,707
d. Interest on a. and b. to Year End	2,327,788	3,126,056
e. Additional Funding Charge	N/A	N/A
f. Interest Charge due to Late Quarterly Contributions	N/A	N/A
g. Total Charges	$ 31,425,139	$ 42,201,760
2. Credits For Plan Year		
a. Prior Year Credit Balance	$ 0	$ 0
b. Employer Contributions (actual/*expected*)	4,304,754	*4,484,871*
c. Amortization Credits	9,252,603	9,252,601
d. Interest on a., b., and c. to Year End	909,086	916,152
e. Full Funding Limit Credit	0	0
f. Total Credits	$ 14,466,443	$ 14,653,624
3. Credit Balance at End of Year [2. - 1., not less than $0]	$ 0	$ 0
4. Funding Deficiency at End of Year [1. – 2., not less than $0]	$ 16,958,696	$ 27,548,136

SECTION IV – CONTRIBUTIONS

Table IV-3
Calculation of the Maximum Deductible Contribution
for the Plan Year Starting January 1, 2018

1. "Fresh Start" Method			
a.	Normal Cost with Expenses	$	1,128,301
b.	Net Charge to Amortize Unfunded Actuarial Liability Over 10 years		16,222,284
c.	Interest on a. and b.		1,388,047
d.	Total		18,738,632
e.	Minimum Required Contribution at Year End		32,208,952
f.	Larger of d. and e.		32,208,952
g.	Full Funding Limitation as of Year End		282,989,308
h.	Regular Maximum Deductible Contribution, lesser of f. and g.	$	32,208,952
2. 140% of Current Liability Calculation*			
a.	RPA 1994 Current Liability at Start of Year	$	486,394,917
b.	Present Value of Benefits Estimated to Accrue during Year		2,735,437
c.	Expected Benefit Payments		20,829,249
d.	Net Interest on a., b. and c. at Current Liability Interest Rate		14,268,007
e.	Expected Current Liability at End of Year, [a. + b. – c. + d.]		482,569,112
f.	140% of e.		675,596,757
g.	Actuarial Value of Assets		160,515,367
h.	Expected Expenses at Start of Year		358,623
i.	Net Interest on c., g. and h. at Valuation Interest Rate		11,995,398
j.	Estimated Value of Assets, [g. – c. – h. + i.]		151,322,893
k.	Unfunded Current Liability at Year End, [f. – j.]	$	524,273,864
3. Maximum Deductible Contribution at Year End, greater of 1. and 2.		$	524,273,864

* Based on combined mortality specified in Reg. §1.412(l)(7)-1 and an interest rate of 2.98%.

SECTION IV – CONTRIBUTIONS

Table IV-4
Development of Actuarial Gain/(Loss)
for the Year Ended December 31, 2017

1.	Unfunded Actuarial Liability at Start of Year	$	109,998,683
2.	Normal Cost (with expenses) at Start of Year	$	1,143,690
3.	Interest on 1. and 2. to End of Year	$	8,891,390
4.	Employer Contributions for Year	$	4,304,754
5.	Interest on 4. to End of Year	$	168,880
6.	Change in Unfunded Actuarial Liability Due to Changes in Plan Design	$	0
7.	Change in Unfunded Actuarial Liability Due to Changes in Assumptions	$	0
8.	Expected Unfunded Actuarial Liability at End of Year [1. + 2. + 3. – 4. - 5. + 6.+ 7.]	$	115,560,129
9.	Actual Unfunded Actuarial Liability at End of Year, not less than zero	$	117,561,076
10.	Actuarial Gain / (Loss) [8. – 9.]	$	(2,000,947)
	(a) Liability Gain / (Loss)	$	1,786,271
	(b) Asset Gain / (Loss)	$	(3,787,217)

SECTION IV – CONTRIBUTIONS

Table IV-5
Schedule of Amortizations Required for Minimum Required Contribution as of January 1, 2018

Type of Base	Date Established	1/1/2018 Outstanding Balance	Remaining Amortization Years [1]	Beginning of Year Amortization Amount
CHARGES				
1. Change in Actuarial Cost Method	01/01/1984	$ 784,298	3	281,792
2. Increase in Employer Contributions	01/01/1985	121,141	2	62,903
3. Increase in Employer Contributions	01/01/1986	8,613	3	3,094
4. Plan Amendments	01/01/1986	309,866	3	111,332
5. Increase in Employer Contributions	01/01/1987	329,778	4	92,192
6. Change in Actuarial Assumptions	01/01/1988	34,583	5	8,020
7. Increase in Employer Contributions	01/01/1988	452,619	5	104,965
8. Increase in Employer Contributions	01/01/1989	627,589	6	125,702
9. Increase in Employer Contributions	01/01/1990	606,566	7	107,874
10. Increase in Employer Contributions	01/01/1991	1,075,662	8	173,316
11. Plan Amendments	01/01/1992	31,156	9	4,619
12. Increase in Employer Contributions	01/01/1992	458,289	9	67,928
13. Change in Actuarial Cost Method	01/01/1992	477,050	3	171,400
14. Change in Actuarial Assumptions	01/01/1992	1,332,855	9	197,558
15. Increase in Employer Contributions	01/01/1993	772,859	10	106,647
16. Increase in Employer Contributions	01/01/1994	1,001,573	11	129,905
17. Increase in Employer Contributions	01/01/1995	855,574	12	105,120
18. Plan Amendments	01/01/1996	496,623	13	58,180
19. Increase in Employer Contributions	01/01/1996	951,775	13	111,500
20. Plan Amendments	01/01/1997	33,079	14	3,716
21. Increase in Employer Contributions	01/01/1997	1,031,161	14	115,811
22. Increase in Employer Contributions	01/01/1998	454,703	15	49,188
23. Plan Amendments	01/01/1998	8,255,335	15	893,025
24. Increase in Employer Contributions	01/01/1999	1,442,141	16	150,860
25. Plan Amendments	01/01/1999	3,255,159	16	340,517
26. Increase in Employer Contributions	01/01/2000	368,230	17	37,379
27. Plan Amendments	01/01/2001	315,490	18	31,169

[1] The remaining amortization period for the charge bases established prior to 1/1/2009 reflect a 5-year automatic extension granted under 431(d).

SECTION IV – CONTRIBUTIONS

Table IV-5
Schedule of Amortizations Required for Minimum Required Contribution as of January 1, 2018

Type of Base	Date Established	1/1/2018 Outstanding Balance	Remaining Amortization Years [1]	Beginning of Year Amortization Amount
CHARGES				
28. Change in Actuarial Assumptions	01/01/2001	$ 584,059	18	57,704
29. Experience Loss	01/01/2001	221,438	3	79,562
30. Increase in Employer Contributions	01/01/2001	1,965,830	18	194,220
31. Plan Amendments	01/01/2002	507,417	19	48,923
32. Increase in Employer Contributions	01/01/2002	1,788,027	19	172,392
33. Experience Loss	01/01/2002	711,789	4	198,986
34. Increase in Employer Contributions	01/01/2003	2,001,211	20	188,729
35. Experience Loss	01/01/2003	3,598,693	5	834,553
36. Increase in Employer Contributions	01/01/2004	1,800,541	21	166,438
37. Experience Loss	01/01/2004	2,984,336	6	597,740
38. Increase in Employer Contributions	01/01/2005	2,032,928	22	184,530
39. Experience Loss	01/01/2005	2,845,818	7	506,113
40. Recognized Portion of the 2008 ENIL	01/01/2009	39,446,049	20	3,720,062
41. Bifurcation Base	01/01/2009	7,184,480	11	931,830
42. Bifurcation Base	01/01/2010	4,611,628	7	820,154
43. Recognized Portion of the 2008 ENIL	01/01/2011	5,704,956	20	538,021
44. Method Change	01/01/2011	5,747,300	3	2,064,950
45. Recognized Portion of the 2008 ENIL	01/01/2012	18,265,843	20	1,722,607
46. Assumption Change	01/01/2012	10,896,796	9	1,615,145
47. Recognized Portion of the 2008 ENIL	01/01/2013	6,105,717	20	575,815
48. Recognized Portion of the 2008 ENIL	01/01/2014	3,852,007	20	363,274
49. Experience Loss	01/01/2015	4,160,661	12	511,203
50. Experience Loss	01/01/2016	6,503,202	13	761,849
51. Experience Loss	01/01/2017	2,419,535	14	271,742
52. Experience Loss	01/01/2018	2,000,947	15	216,453
TOTAL CHARGES		$ 163,824,975		$ 20,988,707

SECTION IV – CONTRIBUTIONS

Table IV-5
Schedule of Amortizations Required for Minimum Required Contribution
as of January 1, 2018

Type of Base	Date Established	1/1/2018 Outstanding Balance	Remaining Amortization Years	Beginning of Year Amortization Amount
CREDITS				
1. Change in Actuarial Assumptions	01/01/1994	$ 213,738	6	$ 42,810
2. Change in Actuarial Assumptions	01/01/1996	1,970,851	8	317,552
3. Change in Actuarial Assumptions	01/01/1999	157,672	11	20,452
4. Change in Actuarial Assumptions	01/01/2002	837,008	14	94,005
5. Experience Gain	01/01/2006	1,653,657	3	594,143
6. Experience Gain	01/01/2007	798,435	4	223,207
7. Experience Gain	01/01/2008	2,695,054	5	624,995
8. Method Change	01/01/2009	12,200,494	21	1,127,780
9. Recognized Portion of the 2008 ENIL	01/01/2010	7,031,771	20	663,149
10. Plan Amendment	01/01/2010	12,773,926	7	2,271,776
11. Bifurcation Base	01/01/2011	5,092,590	8	820,542
12. Bifurcation Base	01/01/2012	2,256,628	9	334,481
13. Bifurcation Base	01/01/2013	12,311,951	10	1,698,930
14. Bifurcation Base	01/01/2014	3,228,820	11	418,779
TOTAL CREDITS		63,222,595		$ 9,252,601
NET CHARGE		**$ 100,602,380**		**$ 11,736,106**

SECTION IV – CONTRIBUTIONS

Table IV-6
Accumulated Reconciliation Account and Balance Test
as of January 1, 2018

1. Amount due to Additional Interest Charges in prior years	$	0
2. Amount due to Additional Funding Charges in prior years		NA
3. Reconciliation Account at Start of Year [1. + 2.]	$	0
4. Net Outstanding Amortization Bases	$	100,602,380
5. Funding Deficiency at Start of Year	$	16,958,696
6. Unfunded Actuarial Liability at Start of Year from Funding Equation [4. – 3. + 5.]	$	117,561,076
7. Actuarial Liability at Start of Year	$	278,076,443
8. Actuarial Value of Assets at Start of Year	$	160,515,367
9. Unfunded Actuarial Liability at Start of Year from Liability Calculation [7. – 8., Limited to Zero]	$	117,561,076

The Fund passes the Balance Test because line 6. equals line 9.

SECTION IV – CONTRIBUTIONS

Table IV-7
Development of Full Funding Limitation for Plan Year Starting January 1, 2018

	Minimum	Maximum
1. Entry Age Actuarial Liability Calculation		
a. Actuarial Liability	$ 278,076,443	$ 278,076,443
b. Normal Cost with Expenses	1,128,301	1,128,301
c. Lesser of Market Value and Actuarial Value of Assets	160,515,367	160,515,367
d. Credit Balance/(Funding Deficiency) at Start of Year	(16,958,696)	0
e. Actuarial Liability Full Funding Limit [a. + b. – c. + d.] x 1.08, limited to zero	$ 109,869,135	$ 128,184,527
2. Full Funding Limit Overide (RPA 1994)		
Interest Rate used to Calculate Current Liability	2.98%	2.98%
a. RPA 1994 Current Liabilty at Start of Year	$ 486,394,917	$ 486,394,917
b. Present Value of Benefits Estimated to Accrue during Year	2,735,437	2,735,437
c. Expected Benefit Payments	20,829,249	20,829,249
d. Net Interest on a., b. and c. at Current Liability Interest Rate	14,268,007	14,268,007
e. Expected Current Liability at End of Year, [a. + b. – c. + d.]	482,569,112	482,569,112
f. 90% of e.	434,312,201	434,312,201
g. Actuarial Value of Assets at Start of Year	160,515,367	160,515,367
h. Expected Expenses	358,623	358,623
i. Net Interest on c., g. and h. at Valuation Interest Rate	11,995,398	11,995,398
j. Estimated Value of Assets, [g. – c. – h. + i.]	151,322,893	151,322,893
k. RPA 1994 Full Funding Limit Override	$ 282,989,308	$ 282,989,308
3. Full Funding Limitation at End of Year, greater of 1e. and 2k.	$ 282,989,308	$ 282,989,308

SECTION V – WITHDRAWAL LIABILITY

The Multi-Employer Pension Plan Amendments Act of 1980 (MPPAA) provides that a contributing employer who withdraws from a multi-employer pension plan, either partially or totally, will be liable to the fund for a share of the fund's Unfunded Vested Benefits (UVB) that exist as of the end of the plan year prior to the year in which the withdrawal occurs. The UVB is apportioned using the Presumptive Method as described in ERISA §4211(b)(1).

Vested Benefits are the benefits that the Fund cannot take away from participants. Vested Benefits belong to two groups of participants: those former employees who have retired and are currently receiving retirement benefits; and those employees and former employees who have not yet retired, but who have accumulated enough service to earn the right to receive a benefit when they do retire even if their employment is terminated prior to retirement.

The total liability for all Vested Benefits as of December 31, 2017 is $270,920,799. This liability has been determined using the actuarial assumptions shown in Appendix C for funding purposes. As of December 31, 2017, the Market Value of Assets applicable to the use of the Presumptive Method of allocating UVB was $167,271,666. Because the present value of Vested Benefits exceeds the assets of the Fund, there are Unfunded Vested Benefits as of December 31, 2017. Consequently, a participating employer who withdraws from the Fund during the plan year beginning January 1, 2018 may have a Withdrawal Liability, which will be based on its share of the Unfunded Vested Benefits.

In addition, a withdrawing employer will be assessed a portion of the Affected Benefit liability in accordance with the provisions of the Pension Protection Act. The Affected Benefit liability arose when the Fund removed certain Adjustable Benefits effective January 1, 2010. The unamortized balance of the Affected Benefit liability at December 31, 2017 is $228,164.

SECTION VI – FASB ASC 960 DISCLOSURES

Table VI-1
Present Value of Accumulated Benefits as of January 1, 2018
in Accordance with FASB ASC 960

		Amounts	Counts
1. Actuarial Present Value of Vested Benefits			
For Retirees and Beneficiaries	$	148,883,041	978
Terminated Vesteds		80,852,537	736
Active Participants		41,185,221	297
Total Vested Benefits	$	270,920,799	2,011
2. Non-vested Benefits	$	3,116,590	71
3. Present Value of Expected Administrative Expenses[1]	$	4,710,976	
4. Accumulated Benefits	$	278,748,365	2,082
5. Market Value of Assets	$	167,271,666	
6. Funded Ratios			
Vested Benefits		62%	
Accumulated Benefits		60%	

Reconciliation of Present Value of Accumulated Benefits

1. Actuarial Present Value at Start of Prior Year	$	272,099,196
2. Increase (Decrease) over Prior Year due to:		
Benefit Accruals	$	1,178,147
Benefit Payments		(18,442,083)
Increase for Interest		21,138,696
Liability Experience (Gains)/Losses		(1,936,567)
Changes in Assumptions		0
Plan Amendments		0
Total	$	1,938,193
3. Actuarial Present Value at End of Prior Year (w/o Administrative Expenses)	$	274,037,389
4. Present Value of Expected Administrative Expenses[1]	$	4,710,976
5. Actuarial Present Value at End of Prior Year (w/ Administrative Expenses)	$	278,748,365

[1] The present value of expected administrative expenses is equal to 1.72% of the Accrued Liability.

APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided by Associated Administrators LLC (AA). Cheiron did not audit any of the data; however, the data was reviewed to ensure that it complies with generally accepted actuarial standards. The data is as of January 1, 2018.

The following is a list of data charts contained in this section:

- Age/Service Distribution for Active Participants
- Counts and Average Benefit Amount by Age for Retirees, Beneficiaries, and Disabled Participants
- Counts and Average Benefit Amount by Age for Terminated Vested Participants

Table A-1
Age/Service Distribution of Active Participants as of January 1, 2018

	COMPLETED YEARS OF CREDITED SERVICE							
AGE	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total
Under 25	6	0	0	0	0	0	0	6
25-29	14	1	0	0	0	0	0	15
30-34	19	17	7	0	0	0	0	43
35-39	18	10	7	10	0	0	0	45
40-44	6	9	11	11	3	0	0	40
45-49	5	10	12	10	13	2	1	53
50-54	7	5	9	11	6	19	7	64
55-59	3	10	9	12	7	15	11	67
60-64	4	3	7	6	6	1	4	31
65 & Up	0	1	2	0	0	1	0	4
Total	82	66	64	60	35	38	23	**368**

Average Age = **46.9** Average Service = **14.0**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-2
Age/Benefit Distribution of Inactive Participants as of January 1, 2018

PENSIONERS AND BENEFICIARIES RECEIVING BENEFITS

	Normal, Early Deferred Vested Retirements		Surviving Spouses and Beneficiaries Receiving Benefits		Total	
Age	**Number**	**Monthly Benefit**	**Number**	**Monthly Benefit**	**Number**	**Monthly Benefit**
Under 55	15	$ 65,114	3	$ 1,595	18	$ 66,709
55-59	66	261,231	5	2,832	71	264,063
60-64	226	541,151	19	9,597	245	550,748
65-69	177	286,589	26	12,178	203	298,767
70-74	155	181,997	32	15,859	187	197,856
75-79	132	128,225	21	8,222	153	136,447
80 & Over	82	54,432	19	5,702	101	60,134
Total	853	$ 1,518,739	125	$ 55,985	**978**	**$ 1,574,724**

DEFERRED VESTED PARTICIPANTS AND SURVIVING SPOUSES ENTITLED TO FUTURE BENEFITS

Age	**Number**	**Monthly Benefit Payable at Normal Retirement Date**
Under 45	135	$ 150,535
45-49	123	220,042
50-54	214	463,493
55-59	197	406,441
60-64	50	50,360
65 & Over	17	9,550
Total	736	$ 1,300,421

APPENDIX A – MEMBERSHIP INFORMATION

Table A-3
Participant Reconciliation from January 1, 2017 to January 1, 2018

	Actives	Terminated Vested	Deferred Spouses	Retired	QDROs	Spouses	Total
1. **January 1, 2017 Valuation**	**379**	**761**	**11**	**803**	**25**	**118**	**2,097**
2. Additions							
a. New entrants	27						27
b. New spouse							0
c. New QDRO							0
d. Pickups				5		4	9
Total Additions	**27**	**0**	**0**	**5**	**0**	**4**	**36**
3. Reductions							
a. Terminated - not vested	(8)						(8)
b. Non-Participating							0
c. Lump sum							0
d. Deaths without beneficiary	(1)	(9)		(25)		(6)	(41)
e. Data corrections, missing					(2)		(2)
Total Reductions	**(9)**	**(9)**	**0**	**(25)**	**(2)**	**(6)**	**(51)**
4. Changes in status							
a. Terminated - vested	(14)	14					0
b. Returned to work	7	(7)					0
c. Retired	(22)	(33)	(1)	55		1	0
d. Died with beneficiary		(4)	4	(4)		4	0
e. Data corrections				(4)		4	0
Total Changes	**(29)**	**(30)**	**3**	**47**	**0**	**9**	**0**
5. **January 1, 2018 Valuation**	**368**	**722**	**14**	**830**	**23**	**125**	**2,082**

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

This summary of plan provisions provides an overview of the major provisions of the pension fund used in the actuarial valuation. It is not intended to replace the more precise language of the plan document and is not to be relied upon for calculating participant benefits.

1. Eligibility

Any employee on whose behalf contributions are made to the pension plan is eligible to participate in the Fund.

2. Normal Retirement

Eligibility: Age 60 with five years of service.

For service after the adoption or imposition of a Rehabilitation Benefit Schedule, the normal retirement age has been increased to age 62 with five years of service.

Amount: The greater of the Flat Benefit or the Percentage of Contributions benefit given below.

Flat Benefit

Employer's Contribution			
At Least	But Less Than	First 60 Months	Later Months
---*	$.15	$100*	$ 55
$.15	$.25	$200	$110
$.25	$.35	$300	$165
$.35	$.45	$400	$220
$.45	---	$500	$275

* This benefit amount is applicable only if the employer's effective date is after January 1, 1981. If the employer's effective date is prior to January 1, 1981, the minimum flat benefit amount for contribution rates less than $0.25 is the $200/$110 amount.

The flat benefit amounts are reduced 5% for each year of service for benefit accrual less than 20. Increases in the level of monthly benefits are made when the employer's contribution rate is increased after the employer's effective date, subject to certain limitations.

Percentage of Contributions Benefit

For service prior to the adoption or imposition of a Rehabilitation Benefit Schedule:

A monthly life annuity reducing to 55% of the original amount after 60 months, equal to (a) 4.17% of all contributions required to be made on a participant's behalf on and after January 1, 1978 plus (b) X% of all contributions required to be made on a participant's behalf

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

prior to January 1, 1978, where "X" is determined from the following table:

Participant's Age on January 1, 1978	X%	Participant's Age on January 1, 1978	X%
60 or over	12.0	49	7.6
59	11.6	48	7.2
58	11.2	47	6.8
57	10.8	46	6.4
56	10.4	45	6.0
55	10.0	44	5.6
54	9.6	43	5.2
53	9.2	42	4.8
52	8.8	41	4.4
51	8.4	40 and under	4.17
50	8.0		

For those employers who elected through a collective bargaining agreement to make a supplemental contribution beginning January 1, 1998, the monthly life annuity above reduces to 55% of the original amount after 96 months instead of 60.

Effective for participants who earned an hour of service on or after January 1, 1999, 24 months is added to the number of months described above (i.e., 60 months and 96 months for a total of 84 and 120 months, respectively).

For service after the adoption or imposition of a Rehabilitation Benefit Schedule:

Preferred Schedule: 2.0% of all contributions required to be made on a participant's behalf on and after the date of adoption of the Preferred Schedule, reducing to 1.0% after the pension has been in effect for 60, 84, 96, or 120 months.

Default Schedule: 1.0% of all contributions required to be made on a participant's behalf on and after the date of adoption or imposition of the Default Schedule.

3. Early Retirement Benefit

Eligibility: At least age 55 and has 20 continuous years of service for benefit accrual; and has ten continuous years of participation.

Amount: Actuarial equivalent of the accrued normal retirement benefit.

Eligibility: On completion of 30 years of service with the Fund.

Amount: Accrued normal retirement benefit payable immediately.

4. Postponed Retirement Benefit

<u>Participant Entitled to Flat Benefit</u>

A participant who elects to postpone his retirement beyond his normal retirement date is entitled to a postponed retirement benefit equal to the flat benefit increased by 5%

for each year of service for benefit accrual after his normal retirement date, provided that the years of service for benefit accrual do not exceed 25, in the aggregate.

Participant Entitled to Percentage

A participant who elects to postpone his retirement of contributions benefit beyond his normal retirement date is entitled to a postponed retirement benefit, in lieu of his normal retirement benefit, in the amount of the normal retirement benefit calculated as if he had reached his normal retirement date on the day he actually retires.

5. Termination Benefit

Eligibility: Five credited years of service for vesting.

Amount: A deferred annuity in the amount of the participant's accrued normal benefit at termination commencing at the participant's normal retirement age.

6. Disability Retirement

Eligibility: At least age 45, and has at least 15 continuous years of service for benefit accrual, and has at least five continuous years of participation, and has at least 40 weeks' payments into the trust fund by an employer, and be totally and permanently disabled for at least 6 months as determined by trustees.

Amount: A lump sum of $2.00 per paid week up to a maximum of $2,000.

Eliminated after the adoption or imposition of a Rehabilitation Benefit Schedule.

In addition, the participant is eligible for the termination benefit under the plan.

7. Death Benefits

Pre-Retirement Lump Sum Death Benefit

Eligibility: Five continuous years of participation in the pension plan, and has had at least 40 weeks' payments into the trust fund by an employer.

Amount: $2.00 per paid week up to a maximum of $2,000 reduced by any disability benefits paid.

Eliminated after the adoption or imposition of a Rehabilitation Benefit Schedule.

Pre-Retirement Spouse's Pension

Eligibility: Available only to married participants who are eligible for a termination benefit, including vested terminated participants.

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

Amount: A life annuity to the participant's lawful spouse in the amount of the surviving spouse's benefit that would have been provided under the qualified joint and survivor annuity payable at what would have been the participant's earliest retirement date.

The pre-retirement spouse's benefit will be paid in addition to the lump sum death benefit.

8. Normal Form of Pension

For participants who are married as of the normal retirement date, the normal retirement benefit is automatically payable as a joint and survivor annuity actuarially equivalent to the above benefit. The normal form of pension payable to a married employee who does not elect otherwise will be an actuarially reduced pension on the Joint and 50% Survivor basis.

9. Effective Date of Plan

August 15, 1965. Restated as of January 1, 2002.

10. Last Amended

Restated as of January 1, 2009 and executed on December 17, 2009. The Rehabilitation Plan was last amended in 2014 to adopt reasonable measures to forestall insolvency.

11. Contributions

Employee: None permitted or required.

Employer: On an hourly or weekly basis, on behalf of participating employees, as specified in the applicable collective bargaining agreement.

12. Changes since Last Valuation

None.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Rates of Investment Return

8.00% for funding and disclosure purposes.

2.98% for determining RPA '94 Current Liability.

This interest rate is the top of the corridor established by law.

All investment returns are net of investment expenses.

2. Rates of Mortality

RP 2000 Mortality Table with blue-collar adjustment and generational mortality improvements. For current liability purposes, the 2018 Static Mortality Table as prescribed under IRS Regulations.

3. Rates of Turnover

Double the combination of Sarason's Advanced Pension Tables. Sample rates:

Age	Rate
20	24.77%
22	22.62
24	20.47
25	19.40
26	18.02
28	15.25
30	12.49
35	8.21
40	5.24
45	2.57
50	0.00

4. Rates of Retirement

Age	Less than 30 Years of Service	30 Years of Service	Over 30 Years of Service
51 – 59	0%	50%	10%
60 and over	100%	100%	100%

5. Rates of Disability

None assumed.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

6. Marriage Rates

Percentage Married:	Males – 80% Females – 80%
Age Differences:	Males are assumed to be three years older than spouse.

7. Administrative Expenses

$358,623 payable at the beginning of the year. Projected expenses incorporate an expense inflation assumption of 3% per year.

For financial disclosure under FASB ASC 960, the present value of future administrative expense is 1.72% of accrued liability. This amount is based on future projected cash flows of $172.25 per participant, mid-year, that increase 3% per year for inflation.

8. Active Participants

All non-retired participants who have hours worked during the plan year ending December 31, 2017.

9. Future Hours Worked By Active Participants

Each active participant will work average annual hours worked in the past three years, excluding the year of entry. No participant is assumed to work less than 870 hours per year.

10. Contribution Rate Used for Determination of Minimum Flat Benefit

The contribution rate in effect on January 1, 2018.

11. Contribution Rate Used for Determination of Percentage of Contributions Benefit

The contribution rate in effect on January 1, 2018.

12. Participant Data

This report is based upon employee data furnished by the Fund Administrator. All non-retired participants who have hours worked during the plan year ending December 31, 2017 are assumed to be active participants as of January 1, 2018 unless identified as having been terminated.

13. Assets

Provided by the independent auditors' report as of December 31, 2017.

The actuarial value of assets is based on the market value with an adjustment to smooth appreciation or depreciation in the market value over the past five years.

80% of the net appreciation or depreciation for the most recently completed plan year is removed from the value of the assets, 60% of the appreciation or depreciation

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

for the year prior to that is removed, etc., until the fifth year prior to this plan year for which none of the appreciation or depreciation is removed. The actuarial value of assets is adjusted, if necessary, to be within 80% to 120% of the market value of the assets.

14. Rehabilitation Plan Benefit Schedule

In preparing our report and valuation results, all participating employers were valued under the Preferred Schedule as of January 1, 2018.

15. Choice of Assumptions

Economic: The expected investment return was chosen by comparing long-term real portfolio returns with inflation expectations. For a portfolio weighted 60% in US Large Cap equity and 40% in investment grade bonds, the 25-year return ending on the valuation date was 8.26% or a return in excess of inflation of approximately 6%. The Fund's investments are invested more diversely than the model portfolio in expectation of generating higher returns but today's inflation targets adopted by the Federal Reserve are lower than the experience over the last 25 years. A long-term rate return of a little over 8% would be indicated by history and Fed policy.

Demographic: The demographic assumptions were last changed with the 2012 valuation. The gains and losses from demographic experience have been minor since then with the exception of a large number of actives becoming terminated vested due to their employer withdrawing from the Fund, which is not part of a demographic assumption set. An experience study will be performed in conjunction with the 2019 valuation.

16. Changes in Assumptions since Last Valuation

For funding calculations, the administrative expense assumption was changed from $334,170 to $358,623 to better reflect recent experience.

For financial disclosure under FASB Topic ASC 960, the present value of future administrative expense is based on future mid-year cash flows of $172.25 per participant that increase 3% per year for inflation. Last year we used $153.96 per participant.

The RPA '94 Current Liability interest rate was changed from 3.05 % to 2.98 % and the RPA '94 Current Liability mortality table was changed from the IRS 2017 Static Mortality Table to the IRS 2018 Static Mortality Table to comply with appropriate guidance.

B. Actuarial Methods

1. Asset Valuation Method

The Actuarial Value of Assets is determined in accordance with Section 3.16 of Revenue Procedure 2000-40 using a five-year smoothing period. Specifically, the actuarial value of assets as of January 1, 2006 is set equal to the market value of assets. For

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

each subsequent plan year, the actuarial value shall be the market value minus a decreasing fraction (4/5, 3/5, 2/5, 1/5) of each gain or loss for each of the preceding four plan years except for 2008 market losses which are recognized at 10% a year due to funding relief. Gains or losses prior to January 1, 2006 are ignored.

The resulting actuarial value of assets is then limited to be no greater than 120% and no less than 80% of the market value of assets on the valuation date.

2. Funding Method: Entry Age Normal Cost Method

Under the Entry Age Normal Cost Method, the individual Entry Age Normal cost is determined for each participant by calculating the level annual contribution required to fund that individual's expected benefits based on the current plan provisions over the participant's expected active working lifetime with the Fund at entry.

At the valuation date, the present value of future normal cost is calculated for each individual participant by multiplying the Entry Age Normal cost by the present value of the participant's expected future active working lifetime with the Fund. The cost for each participant is then summed to yield the present value of future normal costs.

The excess of the present value of future benefits for all individuals at the valuation date over the present value of future normal costs is called the Actuarial Liability, or past service liability.

The excess, if any, of the actuarial liability over the actuarial value of assets is known as the unfunded accrued liability. If the actuarial value of assets exceeds the actuarial liability, the Fund may have a surplus.

3. PRA 2010 Funding Relief

The Fund's Board of Trustees elected funding relief under §431(b)(8) of the Code and §304(b)(8) of ERISA, specifically:

- The "special amortization rule," which allows the Fund's investment losses for the plan year ended December 31, 2008 be separately amortized over 29 years.
- The "special asset valuation rule" in determining the actuarial value of Fund assets which allows the Fund to recognize the 2008 investment loss over ten years, at 10% per year.
- The "special asset corridor" which allows the upper limit on the actuarial value of assets to be raised from 120% to 130% of market value of assets for plan years beginning January 1, 2009 and January 1, 2010.

4. Changes in Actuarial Methods Since Last Valuation

None.

CHEIRON

Classic Values, Innovative Advice

IBT730-0448

Classic Values, Innovative Advice

Warehouse Employees Union Local No. 730 Pension Trust

Actuarial Valuation Report as of January 1, 2020

Produced by Cheiron

February 2021

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February 26, 2021

Warehouse Employees Union
Local No. 730 Pension Trust
911 Ridgebrook Road
Sparks, Maryland 22102

Dear Trustees:

At your request, we have performed the January 1, 2020 Actuarial Valuation of the Warehouse Employees Union Local No. 730 Pension Trust (the "Fund"). This report contains information on the Fund's assets and liabilities and discloses contribution levels, including the minimum required amount as mandated by Federal law. This report is for the use of the Board of Trustees and its auditors in preparing financial reports in accordance with applicable law and accounting requirements.

Your attention is called to the introductory section in which we refer to the general approach employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions on which our findings are based. Those comments are the basis for our certification that this report is complete to the best of our knowledge and belief. The results of this report are only applicable to the 2020 Plan Year. Future results may differ significantly from the current plan year presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions (e.g. Covid-19); changes in assumptions; and changes in plan provisions or applicable law.

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

This report was prepared exclusively for the Fund for the purposes described herein. Other users of this valuation report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other users.

Sincerely,
Cheiron

[redacted]

Peter R. Hardcastle, CFA, FSA, MAAA, EA
Principal Consulting Actuary

[redacted]

Consulting Actuary

FOREWORD

Cheiron has performed the Actuarial Valuation of the Warehouse Employees Union Local No. 730 Pension Trust as of January 1, 2020. The purpose of this report is to:

1) **Measure and disclose**, as of the valuation date, the financial condition of the Fund;

2) **Provide specific information** and documentation required by the Federal Government and the auditors of the Fund; and

3) **Review past and expected trends** in the financial conditions of the Fund.

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

Section I presents a summary of the key valuation results, general comments about the results, a review of historical trends including assets versus liabilities, minimum funding, participation and cash flows, and projection scenarios.

Section II discloses specific risks that may significantly affect the Plan's future financial condition.

Section III contains exhibits relating to the valuation of assets.

Section IV shows the various measures of liabilities.

Section V shows the development of the minimum and maximum contributions.

Section VI provides the calculation of unfunded vested benefits for withdrawal liability purposes as of January 1, 2020 that would be allocated to employers that withdrew during the 2020 calendar year.

Section VII provides the FASB Accounting Standard Codification (ASC) 960 Disclosure required by the Fund's auditor.

The appendices to this report contain a summary of the Fund's membership at the valuation date, a summary of the major provisions of the Fund, and the actuarial methods and assumptions used in the valuation.

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

The actuarial assumptions reflect our understanding of the likely future experience of the Fund and the assumptions, taken individually, represent our best estimate for the future experience of the Fund. Future experience may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

Please note this valuation was prepared using census data and financial information as of the valuation date, January 1, 2020 and events following that date are not reflected.

SECTION I – SUMMARY

The table below sets out the principal results of this year's valuation and compares them to last year's results. Both years reflect that the Board adopted funding relief under Internal Revenue Code Sections 431(d) and 431(b)(8).

Table I-1
Summary of Principal Results

	January 1, 2019	January 1, 2020	Change
Participant Counts			
Actives	301	294	(2.3%)
Terminated Vesteds	738	703	(4.7%)
In Pay Status	1,001	1,030	2.9%
Total	2,040	2,027	(0.6%)
Financial Information			
Market Value of Assets	$ 153,296,273	$ 161,910,558	5.6%
Actuarial Value of Assets	158,236,069	154,623,680	(2.3%)
AVA as a % of MVA	103.2%	95.5%	
Entry Age Actuarial Liability	$ 279,273,711	$ 295,591,424	5.8%
Surplus (Unfunded Actuarial Liability)	(121,037,642)	(140,967,744)	N/A
Present Value of Accrued Benefits/Accrued Liability	$ 275,242,089	$ 290,601,829	5.6%
Accrued Benefit Surplus (Unfunded)	(117,006,020)	(135,978,149)	N/A
Accrued Benefit Funding Ratio (AVA Basis)	57.5%	53.2%	N/A
Present Value of Vested Benefits	$ 272,863,143	$ 288,102,507	5.6%
Vested Benefit Surplus (Unfunded)	(119,566,870)	(126,191,949)	N/A
Vested Benefit Funding Ratio (MVA Basis)	56.2%	56.2%	N/A
Contributions and Cash Flows			
ERISA Credit Balance (Beginning of Year)	$ (25,845,291)	$ (36,920,899)	42.9%
Employer Contributions (actual/*estimated*)	4,543,402	*4,734,628*	4.2%
ERISA Minimum Funding before Credit Balance	13,729,626	14,617,163	6.5%
Prior Year Benefit Payouts	$ 19,391,415	$ 20,567,862	6.1%
Prior Year Administrative Expenses	316,151	355,379	$ 0

SECTION I – SUMMARY

The following is an analysis of the Fund's recent past performance followed by historical results for the last ten years. After that, projections of future results are shown.

General Comments

Investment and liability experience and their effect on future costs traditionally have been the focus of year-to-year analyses.

- The Market Value of Assets (MVA) returned 17.22% during the year ending December 31, 2019. The total actuarial investment gain (the difference between actual and expected returns) was $13.4 million.

- For long-term planning and especially for minimum funding requirements, the Fund develops an Actuarial Value of Assets (AVA) to smooth investment gains and losses over time. Due to the continued phase-in of historical investment gains and losses of the past five years, the rate of return on the AVA was 8.51%, resulting in an actuarial gain of $0.8 million.

- For minimum funding requirements, the Fund's actuarial liability is determined using the Entry Age Normal Cost Method. Although the liability increased by $16.3 million (primarily due to assumption changes), it increased less than expected, resulting in a liability experience gain of $1.1 million.

- Effective with this valuation, we have updated the discount rate assumption from 8.00% to 7.00%. Changes were also made to the retirement and mortality rates, as well as the marital and forms of payment assumptions. The net impact of the assumption changes was a $15.7 million increase in the Actuarial Liability. Please refer to Appendix C for more details on the changes to the actuarial assumptions.

- The end of year minimum required contribution, before taking into account the credit balance, increased from $13.7 million to $14.6 million. The increase was mostly attributable to the assumption changes, which added an annual amortization charge of $1.6 million.

- During the 2019 Plan Year, the Fund's funding deficiency increased from $25.8 million to $36.9 million. Due to the Pension Protection Act of 2006 (PPA) no excise tax is due provided the Fund has a valid Rehabilitation Plan and all employers are complying with it.

PPA added a significant layer of new considerations related to the Fund's PPA funded status.

- For 2020, the Fund was certified as "Critical and Declining" under PPA as amended. This was caused by the current funding deficiencies and the projected insolvency within the next 13 years. The PPA status is re-determined annually.

- The Fund's funded ratio for PPA purposes is based on the accrued liability determined using the Unit Credit Cost Method. It decreased from 57.5% to 53.2% primarily due to the increase in liability for the assumption changes, as well as last year's negative cash flow (contributions less benefit payments and expenses) of approximately 11% of the assets.

SECTION I – SUMMARY

- The Board of Trustees of the Fund first adopted a Rehabilitation Plan (RP) on November 26, 2009. The Rehabilitation Plan is applicable for collective bargaining agreements and participation agreements renewed or extended after December 25, 2009. The Fund's Rehabilitation Period began on January 1, 2012.

  After the initial adoption of the Rehabilitation Plan, subsequent employer withdrawals resulted in a deterioration of the funding of the plan. Consequently, in 2014 the Trustees updated the Rehabilitation and adopted a "reasonable measures to forestall insolvency" approach for PPA compliance.

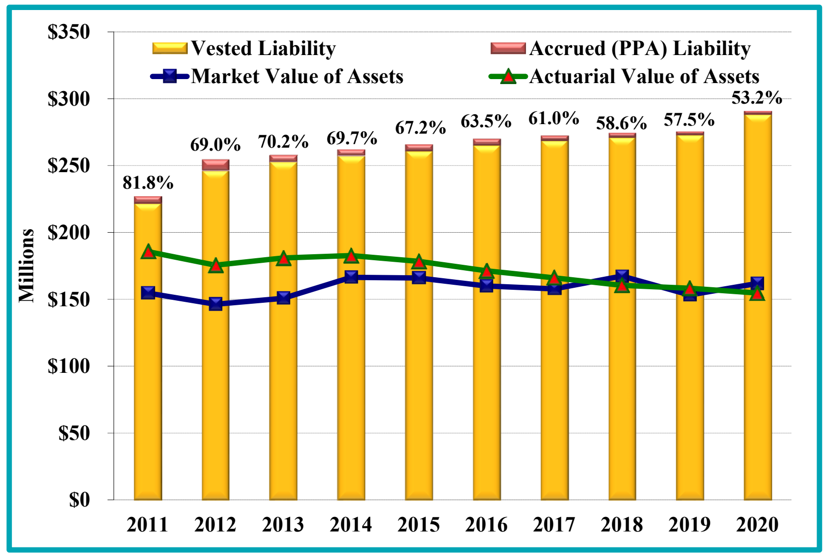
- In February 2010, the Trustees took a five-year extension of the Fund's amortization bases as of January 1, 2009 under Section 431(d) of the Code. The net impact on the Funding Standard Account is a $18.2 million smaller funding deficiency, as of January 1, 2020, from what it would be without the Section 431(d) extension. Unless indicated otherwise, throughout this report, the terms credit balance and funding deficiency refer to the amounts reflecting the 431(d) extension.

- The Unfunded Vested Benefits (UVB) on a market value basis increased from $119.6 million to $126.2 million. Under the provisions of the Multiemployer Pension Plan Amendment Act of 1980 (MPPAA) if the vested benefit liabilities exceed fund assets, an assessment of Withdrawal Liability may be made to any employer withdrawing from the Fund.

Historical Summary

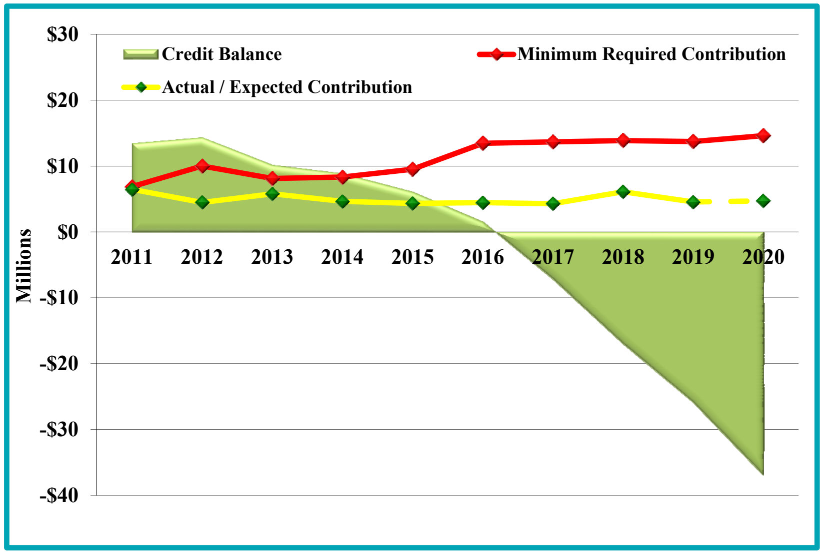
It is important to take a step back from the results and view them in the context of the Plan's recent history. Below are two charts which display key results in the valuations of the last ten years.

Assets & Liabilities: The following graph compares historical assets and liabilities. The gold bars represent the present value of vested benefits while the red bars add the additional non-vested benefits making up the Accrued Liability. The blue line is the Market Value of Assets and the green line is the Actuarial Value of Assets. The percentages shown on top of the bars represent the Fund's PPA funding ratio (AVA as a percentage of Accrued Liabilities).



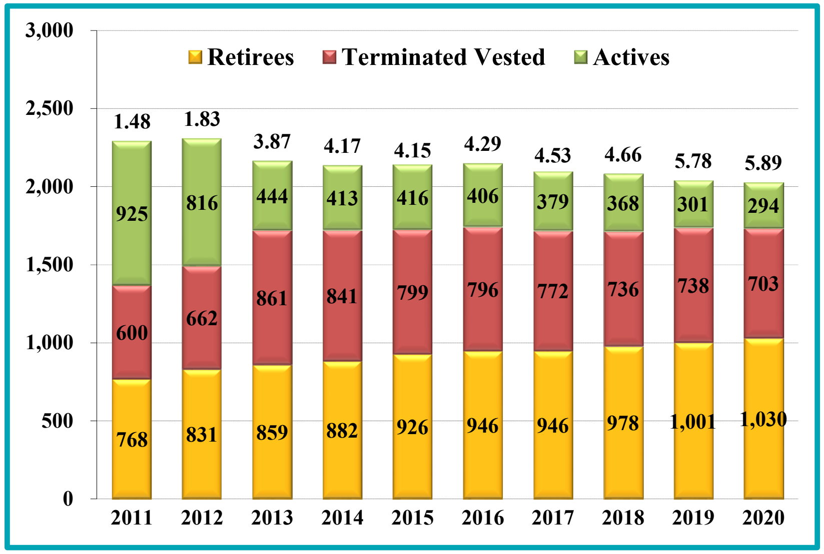
SECTION I – SUMMARY

Minimum Funding: The next graph shows the Credit Balance (green area) which is the accumulated contributions in excess of the Minimum Required Contribution before the Credit Balance (red line), and the Actual Contributions (yellow line).



On average, the contributions for the last ten years have been significantly lower than the minimum required contribution. This has caused a steep decline in the credit balance since 2012 leading to a funding deficiency beginning in 2017. Contributions, including expected Withdrawal Liability payments, are expected to again fall short of the minimum required contribution next year.

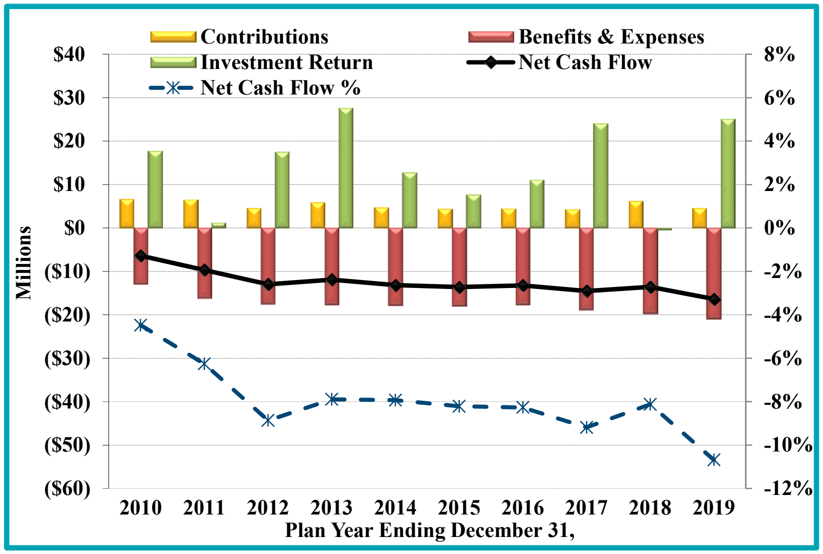
Participation: The following graph shows the participation of the Fund at successive valuation dates. The numbers above each bar represent the number of inactive members to active members (i.e., support ratio) at each valuation date. The support ratio increased significantly as of January 1, 2013 due to the withdrawal of two participating employers (Jessup and McKesson) during 2012. Another increase is noticeable as of January 1, 2019 as a result of the 2018 withdrawal of Adams Burch.



SECTION I – SUMMARY

Cash Flow: The following graph shows the Fund's cash flow, contributions less benefit payments and expenses, at successive valuation dates. This is a critical measure, as it reflects the ability to have funds available to meet benefit payments without having to make difficult investment decisions, especially during volatile markets.

The main consequence for a fund with negative cash flow is that the impact of market fluctuations will be more severe. This is because assets will have to be used to pay benefits in down markets. This means there will be less principal left to benefit from later favorable investment experience.

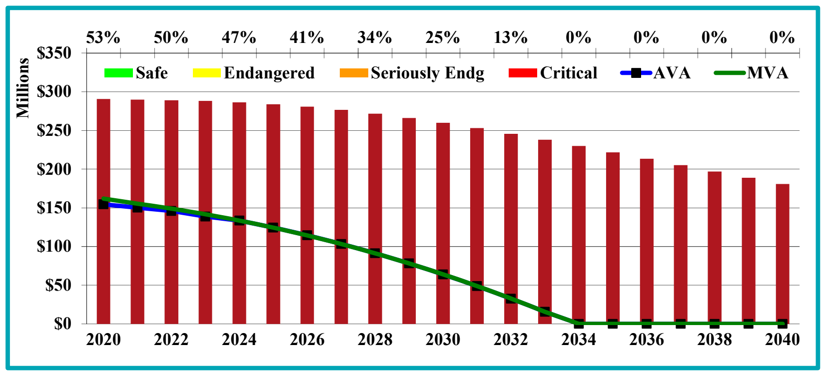


Future Outlook

In this section we move away from viewing a single year's results or historical trends and focus on the future of the Fund. In light of the Fund's "Critical and Declining" classification, this future outlook focuses on the projection of assets.

The following projection assumes participation remains constant, annual contribution increases of 4.9% through 2027, 2% through 2032, and 0% thereafter, the expected Withdrawal Liability payments from McKesson Drug continue, and all of the assumptions set out in Appendix C are realized including the return of 7% per year.

Under this scenario, the projection shows the Fund will exhaust its assets during 2033. This is three years later than last year's projection showed. This delay in insolvency is mainly the result of the return on the Market Value of Assets during 2019 exceeding last year's expected 8% return.



SECTION II – RISK ANALYSIS

Actuarial valuations are based on a set of assumptions about future economic and demographic experience. In our opinion, the assumptions we are using are our best estimate of the Fund's long-term future experience.

Nonetheless, it is important to realize that future experience could deviate, sometimes significantly, from that predicted by our assumptions. This deviation of actual experience compared to expected experience can affect the future viability of the Fund and must be monitored closely.

This section of the report is intended to identify the primary risks to this fund, provide some background information about those risks and the factors that influence them, and provide an assessment of them.

Identification of Risks

The primary risk that every plan faces is future insolvency. This is the risk that its current assets and future contributions are or will be inadequate to fund all plan benefits. For some plans, this risk is small. For others it is significant. This insolvency risk can manifest itself in several different ways:

- An impending insolvency date, a near term date when its assets will be completely depleted,
- Funded ratios that are declining, especially if they are currently less than 100%, and
- Funded ratios that are never expected to exceed 100%.

As shown in the previous section, under the baseline projection scenario, the Fund is projected to become insolvent during the 2033 plan year. Once the Fund becomes insolvent, benefits are required to be reduced to the PBGC guaranteed level. While this will have little or no impact for some participants, it could result in significant reductions in the monthly benefit amount being paid for others.

The remainder of this section focuses on how the potential insolvency date could change thereby changing the amount of time before such benefit cuts would go into effect. The key items that will impact this date are:

- Investment returns,
- Contributions, and
- Withdrawal Liability payments.

Other risk factors that are not explicitly identified may also turn out to be important.

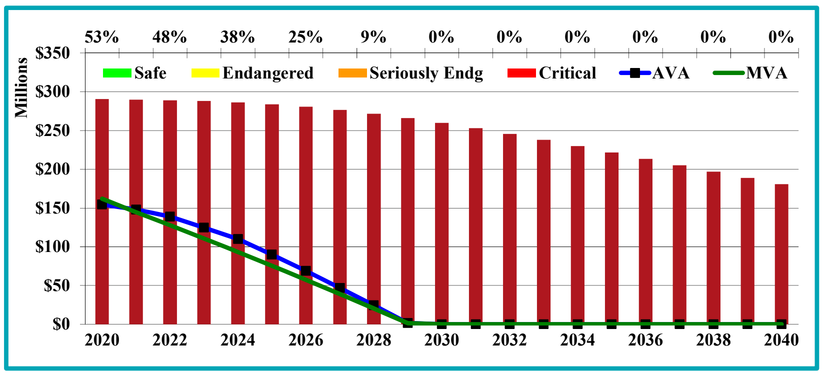
Investment Risk is the potential for investment returns to be different than expected. The current assumption for investment returns is 7.00% per year net of investment expenses. This is a long-term expectation. In any given year, investment returns can be greater than or less than this assumption. However, over time the geometric mean of the actual investment returns over time should be close to the assumption.

Lower investment returns than anticipated will decrease the expected future funding ratio and increase the FSA contribution requirement which will lower the credit balance in the future.

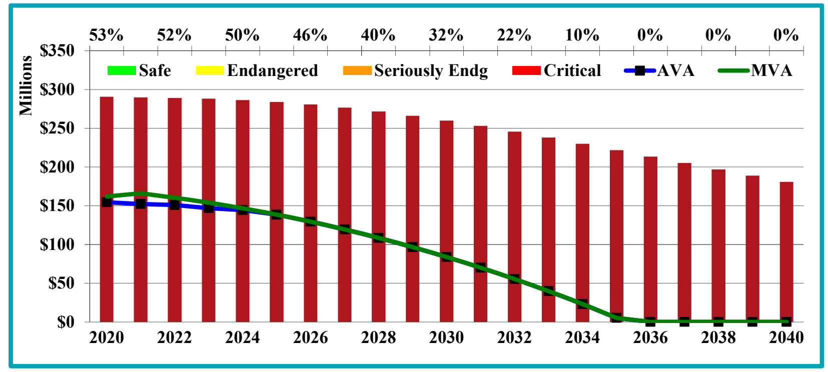
SECTION II – RISK ANALYSIS

The potential magnitude and volatility of future investment returns is influenced by economic conditions and the Fund's asset allocation. A plan with an investment portfolio generating higher expected rates of return may anticipate lower future contribution requirements; however, this approach also comes with higher amounts of volatility.

Due to the significant underfunding and large negative net cash flow, investment returns have a much less significant impact upon the projected insolvency date. The following projection illustrates the impact of investment returns by assuming a 0% return going forward. Under this scenario, the Fund is projected to be insolvent during the 2029 plan year, four years earlier than the baseline.



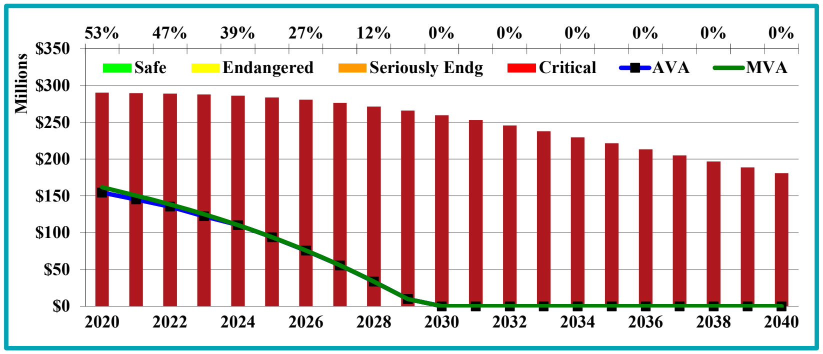
Alternatively, if the Fund were to earn 14% for the 2020 plan year, the insolvency date is pushed back to 2035, as shown in the following projection.



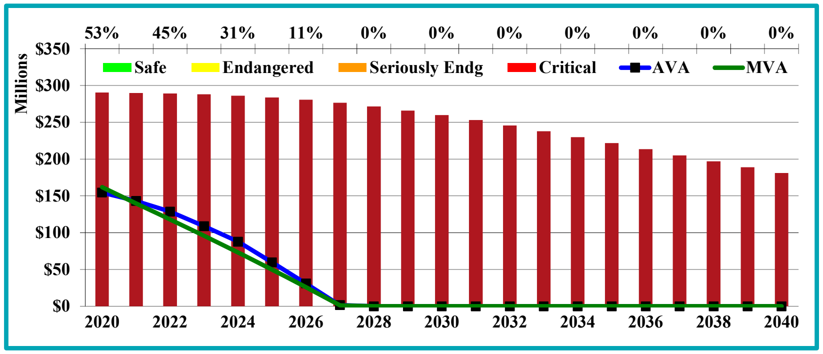
Contribution and Withdrawal Liability Payment risk is the potential for actual future money coming into the Fund to deviate from what is expected in the baseline projection. In particular, additional future withdrawals can reduce the regular contribution income. Additionally, bankruptcies can impact the willingness or ability of previously withdrawn employers to make their required withdrawal liability payments to the Fund.

SECTION II – RISK ANALYSIS

The following projection illustrates the contribution and withdrawal liability risk by showing the impact of fully eliminating all such income. In this projection the Fund is projected to be insolvent during the 2029 plan year.



The combination of no investment returns and the elimination of all future contribution and withdrawal liability income would move the insolvency into the 2027 plan year, as shown below.



SECTION III – ASSETS

Assets at Market Value

Market values represent "snap-shot" or "cash-out" values, which provide the principal basis for measuring financial performance from one year to the next.

Table III-1
Statement of Assets at Market Value, December 31

	2018	2019
Invested Assets		
Common Stocks	$ 34,941,233	$ 43,571,348
U.S. Government Agencies Notes and Bonds	860,220	668,067
Corporate Notes and Bonds	1,721,131	1,020,887
Limited Partnerships & DFEs	82,762,206	86,669,192
Common Collective Trusts	21,110,554	24,905,194
Temporary Investments	6,942,729	3,248,646
Total Investments:	$ 148,338,073	$ 160,083,334
Other Assets		
Employer Contributions Receivable	378,288	303,271
Accrued Interest and Dividends	74,708	60,372
Other Receivables	5,639	1,802
Prepaid Expenses	21,668	25,146
Cash	1,646,727	1,729,331
Accounts Payable	(125,220)	(146,937)
Accounts Receivable	2,956,390	0
Due to Broker	0	(145,761)
Total Non-Invested Assets:	$ 4,958,200	$ 1,827,224
Net Assets Available for Benefits	$ 153,296,273	$ 161,910,558

The table above shows the market value of assets taken into account for funding purposes. These values exclude receivable withdrawal liability payments because they are not "receivable" as defined by the IRS. At December 31, 2019, the amount including this receivable shown in the audited financial statement was $167,635,979.

Changes in Market Value

The components of asset change are:

- Contributions
- Benefit payments
- Expenses
- Investment income (realized and unrealized)

The specific changes during 2019 are presented below.

Table III-2 *
Changes in Market Values

Value of Assets - January 1, 2019	$ 153,296,273
Employer Contributions	3,879,728
Withdrawal Liability Payments	663,674
Investment Return (Gross)	26,225,080
Benefit Payments	(20,567,862)
Administrative Expenses	(355,379)
Investment Expenses	(1,230,956)
Value of Assets - January 1, 2020	$ 161,910,558

* On this table $1,000 of other income is classed as investment income.

SECTION III – ASSETS

Investment Performance

The following table calculates the actuarial investment gain/loss and the return for the plan year on a market value basis. The return is an appropriate measure for comparing the actual asset performance to the prior year's long-term 8% assumption.

Table III-3
Change in Market Value of Assets

Item	Market Value
January 1, 2019 value	$ 153,296,273
2019 Employer Contributions	3,879,728
2019 Withdrawal Liability Payments	663,674
2019 Benefit Payments	(20,567,862)
Actual Administrative Expenses	(355,379)
Expected Investment Earnings (8%)	11,621,113
Expected Value December 31, 2019	$ 148,537,547
Investment Gain / (Loss)	13,373,011
January 1, 2020 value	$ 161,910,558
Investment Return	17.22%

Assets at Actuarial Value

For long-term planning, actuaries developed an actuarial value of assets using smoothing techniques to mitigate the effects of short-term volatility exhibited by the capital markets. The asset valuation method, adopted with the 2007 valuation, phases in actuarial investment gains and losses over five years. The actuarial value of assets is then constrained, if necessary, so that it is not more than 120% of the market value and is not less than 80% of the market value. The asset valuation method is described more fully in Appendix C.

The table below shows the development of the actuarial value of assets.

Table III-4
Development of Actuarial Value of Assets

Plan Year	Investment Gains / (Losses)	Percent Recognized	Percent Deferred	Amount Deferred
Market Value of Assets as of January 1, 2020				$ 161,910,558
12/31/2015	(5,127,301)	100%	0%	0
12/31/2016	(1,210,474)	80%	20%	(242,095)
12/31/2017	11,936,534	60%	40%	4,774,614
12/31/2018	(13,240,083)	40%	60%	(7,944,050)
12/31/2019	13,373,011	20%	80%	10,698,409
Total				$ 7,286,878
Preliminary Actuarial Value of Assets January 1, 2020				$ 154,623,680
120% of MV, upper limit for actuarial value				194,292,670
80% of MV, lower limit for actuarial value				129,528,446
Actuarial Value of Assets January 1, 2020				$ 154,623,680
- as a percent of Market Value of Assets				95.5%

SECTION III – ASSETS

Asset Gain/(Loss)

The following table calculates the investment gain/loss and the return for the plan year on an actuarial value basis. This gain/loss is one component of the Fund's overall actuarial experience gain/loss, which is recognized for minimum funding requirements.

Over 2019, the Fund's assets at actuarial value produced an actuarial gain of $763,286.

Table III-5
Change in Actuarial Value of Assets

Item	Actuarial Value
January 1, 2019 value	$ 158,236,069
2019 Employer Contributions	3,879,728
2019 Withdrawal Liability Payments	663,674
2019 Benefit Payments	(20,567,862)
Expected Administrative Expenses	(353,198)
Expected Investment Earnings (8%)	12,001,983
Expected Value December 31, 2019	$ 153,860,394
Investment Gain / (Loss)	763,286
January 1, 2020 value	$ 154,623,680
Investment Return	8.51%

SECTION IV – LIABILITIES

In this section, we present detailed information on the Fund's liabilities including:

- **Disclosure** of the Fund's liabilities at January 1, 2019 and January 1, 2020; and
- Statement of **changes** in these liabilities during the year.

Disclosure

Several types of liabilities are calculated and presented in this report. Each type is distinguished by the purpose for which they are used.

- **Actuarial Liabilities:** Used in determining minimum funding requirements, maximum tax-deductible contributions, and long-term funding targets, this amount is calculated using the **Entry Age Normal Cost Method.**
- **Accrued Liabilities:** Used for communicating the current levels of liabilities, these liabilities represent the total amount of money needed to fully pay off all future obligations of the Fund using funding assumptions and assuming no further accrual of benefits. They are determined using the **Unit Credit Cost Method**.

  These liabilities are used for determining funded status under PPA. The law requires them to be compared to the actuarial value of assets to measure funded status. They can also be used to establish comparative benchmarks with other plans.

  The accrued liabilities must also be included in the Fund's financial statement for accounting disclosure purposes (FASB ASC Topic No. 960). However, the accounting disclosure must also include the present value of future administrative expenses. This sum is called the Present Value of Accumulated Benefits.

- **Vested Liabilities:** Used for administrative purposes in determining employer withdrawal liability, this liability represents that portion of the accrued liabilities, which are vested.
- **Current Liabilities:** Used for Federal Government compliance purposes, the calculation of this liability is defined by federal regulations and is used to determine maximum allowable tax-deductible contributions.

The table on the following page discloses each of these liabilities for the current valuation and the prior one. With respect to each disclosure, a subtraction of the appropriate value of fund assets yields, for each respective type, a **surplus or unfunded liability**.

SECTION IV – LIABILITIES

Table IV-1
Liabilities/Net Surplus (Unfunded)

	January 1, 2019	January 1, 2020
ACTUARIAL LIABILITY		
Active Participant Benefits	$ 47,049,955	$ 45,558,251
Retiree and Inactive Benefits	232,223,756	250,033,173
Actuarial Liability	**$ 279,273,711**	**$ 295,591,424**
Actuarial Value of Assets	158,236,069	154,623,680
Net Surplus (Unfunded)	**$ (121,037,642)**	**$ (140,967,744)**
ACCRUED LIABILITY		
Active Participant Benefits	$ 43,018,333	$ 40,568,656
Retiree and Inactive Benefits	232,223,756	250,033,173
Accrued Liability	**$ 275,242,089**	**$ 290,601,829**
Actuarial Value of Assets	158,236,069	154,623,680
Net Surplus (Unfunded)	**$ (117,006,020)**	**$ (135,978,149)**
VESTED LIABILITY		
Accrued Liability	$ 275,242,089	$ 290,601,829
Less Present Value of Non-Vested Benefits	2,378,946	2,499,322
Vested Liability	**$ 272,863,143**	**$ 288,102,507**
Actuarial Value of Assets	158,236,069	154,623,680
Net Surplus (Unfunded)	**$ (114,627,074)**	**$ (133,478,827)**
CURRENT LIABILITY (RPA 1994)		
Current Liability	**$ 474,757,777**	**$ 472,892,075**
Market Value of Assets	153,296,273	161,910,558
Net Surplus (Unfunded)	**$ (321,461,504)**	**$ (310,981,517)**

SECTION IV – LIABILITIES

Allocation of Liabilities by Type

The Fund's participants may qualify for a benefit upon death, termination, and disability as well as upon retirement. The value of the liabilities arising from each of these sources is shown in the following table.

Table IV-2
Allocation of Liabilities by Type

Benefit Type	Retirement	Termination	Death	Expenses	Total
Entry Age Normal Cost	$ 606,502	$ 172,199	$ 8,927	$ 366,579	$ 1,154,207
Entry Age Actuarial Liability					
Actives	$ 45,026,334	$ 271,679	$ 260,237	$ 0	$ 45,558,250
Terminated Vesteds	0	79,970,379	0	0	79,970,379
Retirees and Beneficiaries	163,612,871	0	6,449,924	0	170,062,795
Total	$ 208,639,205	$ 80,242,058	$ 6,710,161	$ 0	$ 295,591,424
Current Liability Normal Cost	$ 2,384,989	$ 261,838	$ 14,541	$ 0	$ 2,661,368
Current Liability					
Actives	$ 72,745,799	$ 3,621,221	$ 332,096	$ 0	$ 76,699,116
Terminated Vesteds	0	151,318,754	0	0	151,318,754
Retirees and Beneficiaries	235,739,438	0	9,134,767	0	244,874,205
Total	$ 308,485,237	$ 154,939,975	$ 9,466,863	$ 0	$ 472,892,075
Vested Current Liability					
Actives	$ 26,657,089	$ 45,812,957	$ 327,622	$ 0	$ 72,797,668
Terminated Vesteds	0	151,318,754	0	0	151,318,754
Retirees and Beneficiaries	235,739,438	0	9,134,767	0	244,874,205
Total	$ 262,396,527	$ 197,131,711	$ 9,462,389	$ 0	$ 468,990,627

SECTION IV – LIABILITIES

Changes in Liabilities

Each of the liabilities shown in the table below is subject to change at successive valuations as the experience of the Fund varies from that assumed in the valuation. The liabilities may change for any of several reasons, including:

- New hires since the last valuation
- Benefits accrued since the last valuation
- Plan amendments
- Interest on liabilities
- Benefits paid to retirees
- Participants leaving employment at rates different from expected
- Changes in actuarial assumptions
- Changes in actuarial methods

Table IV-3
Reconciliation of Liabilities

	Actuarial Liability	Accrued Liability
Liabilities as of January 1, 2019	$ 279,273,711	$ 275,242,089
Liabilities as of January 1, 2020	$ 295,591,424	$ 290,601,829
Liability Increase (Decrease)	$ 16,317,713	$ 15,359,740
Change Due due to:		
Plan Amendment	$ 0	$ 0
Assumption Change	15,725,253	14,691,479
Accrual of Benefits	708,045	1,091,725
Passage of Time (Interest less benefits paid)	1,023,791	731,956
Other Sources	0	0
Actuarial Liability (Gain) / Loss	(1,139,376)	(1,155,420)
Total Change	$ 16,317,713	$ 15,359,740

SECTION V – CONTRIBUTIONS

In this section, we present detailed information on the Fund's contributions from two perspectives:

- **Actuarially determined** contributions or actuarial cost and
- **Government Limits,** which could affect the above.

Actuarial Determined Contributions

For this Fund, the cost method used to calculate the actuarially determined contribution is the **Entry Age Normal Cost Method**. The actuarially determined contribution or cost is determined in two parts.

The first part is the **Entry Age Normal Cost**. This is the level cost of providing the benefits promised by the Fund to each individual participant in service at the valuation date assuming that contributions are made over the period of the participant's working life. The normal cost includes a provision for the Fund's expenses.

The second part is an amortization payment to pay off the unfunded actuarial liability. The unfunded actuarial liability is the difference between the actuarial assets of the Fund at the valuation date and the assets the Fund should hold as determined by the actuarial cost method. The amortization payment is determined using the amortization schedule established by the IRS minimum funding rules.

Government Limits

ERISA and the IRS tax code place various limits on the contributions made to qualified pension plans. The limits impact the minimum that must be paid, the maximum that can be deducted and the timing of contributions. Pension plans are required to retain an Enrolled Actuary to report on the progress of funding through completion of Schedule MB to Form 5500 on an annual basis. The actuarially determined contribution/cost for 2020 is shown in the following table compared to the various Government Limits and the estimated employer contributions (including withdrawal liability payments).

The table below summarizes the results of the tables on the following pages. It also shows the per capita actuarially determined contribution/actuarial cost and per capita expected contribution. The cost is almost three times the expected contribution.

Table V-1
Contributions for 2020

Actuarially Determined Contribution		
Entry Age Normal Cost	$	787,628
Administrative Expense		366,579
Amortization Payment		12,506,693
Interest to End of Year		956,263
Total	$	14,617,163
Government Limits		
Maximum Deductible Contribution	$	511,983,142
Minimum Required Contribution (before Credit Balance)	$	14,617,163
Funding Deficiency (with interest to End of Year)	$	39,505,362
Minimum Contribution (after Credit Balance)	$	54,122,525
Employer Contributions with Interest*	$	4,920,370
Count of Active Participants		294
Per Capita Actuarial Cost	$	49,718
Per Capita Contribution	$	16,736

* Estimated contributions of $4,734,628 (including interest to end of year)

SECTION V – CONTRIBUTIONS

Table V-2
Funding Standard Account for 2019 and 2020 Plan Years

	2019	2020
1. Charges For Plan Year		
a. Funding Deficiency	$ 25,845,291	$ 36,920,899
b. Normal Cost with Expenses	1,061,243	1,154,207
c. Amortization Charges	20,988,701	21,780,503
d. Interest on a. and b. to Year End	3,831,619	4,189,893
e. Additional Funding Charge	N/A	N/A
f. Interest Charge due to Late Quarterly Contributions	N/A	N/A
g. Total Charges	$ 51,726,854	$ 64,045,502
2. Credits For Plan Year		
a. Prior Year Credit Balance	$ 0	$ 0
b. Employer Contributions (actual/*expected*)	4,543,402	*4,734,628*
c. Amortization Credits	9,337,327	9,273,810
d. Interest on a., b., and c. to Year End	925,226	812,076
e. Full Funding Limit Credit	0	0
f. Total Credits	$ 14,805,955	$ 14,820,514
3. Credit Balance at End of Year [2. - 1., not less than $0]	$ 0	$ 0
4. Funding Deficiency at End of Year [1. – 2., not less than $0]	$ 36,920,899	$ 49,224,988

SECTION V – CONTRIBUTIONS

Table V-3
Calculation of the Maximum Deductible Contribution for the Plan Year Starting January 1, 2020

1.	"Fresh Start" Method		
a.	Normal Cost with Expenses	$	1,154,207
b.	Net Charge to Amortize Unfunded Actuarial Liability Over 10 years		18,757,603
c.	Interest on a. and b.		1,393,827
d.	Total		21,305,637
e.	Minimum Required Contribution at Year End		54,122,525
f.	Larger of d. and e.		54,122,525
g.	Full Funding Limitation as of Year End		278,199,232
h.	Regular Maximum Deductible Contribution, lesser of f. and g.	$	54,122,525
2.	140% of Current Liability Calculation*		
a.	RPA 1994 Current Liability at Start of Year	$	472,892,075
b.	Present Value of Benefits Estimated to Accrue during Year		2,661,368
c.	Expected Benefit Payments		21,696,748
d.	Net Interest on a., b. and c. at Current Liability Interest Rate		13,711,126
e.	Expected Current Liability at End of Year, [a. + b. – c. + d.]		467,567,821
f.	140% of e.		654,594,949
g.	Actuarial Value of Assets		154,623,680
h.	Expected Expenses at Start of Year		366,579
i.	Net Interest on c., g. and h. at Valuation Interest Rate		10,051,454
j.	Estimated Value of Assets, [g. – c. – h. + i.]		142,611,807
k.	Unfunded Current Liability at Year End, [f. – j.]	$	511,983,142
3.	Maximum Deductible Contribution at Year End, greater of 1. and 2.	$	511,983,142

* Based on combined mortality specified in Reg. §1.412(l)(7)-1 and an interest rate of 2.95%.

SECTION V – CONTRIBUTIONS

**Table V-4
Development of Actuarial Gain/(Loss)
for the Year Ended December 31, 2019**

1.	Unfunded Actuarial Liability at Start of Year	$ 121,037,642
2.	Normal Cost (with expenses) at Start of Year	$ 1,061,243
3.	Interest on 1. and 2. to End of Year	$ 9,767,911
4.	Employer Contributions for Year	$ 4,543,402
5.	Interest on 4. to End of Year	$ 178,241
6.	Change in Unfunded Actuarial Liability Due to Changes in Plan Design	$ 0
7.	Change in Unfunded Actuarial Liability Due to Changes in Assumptions	$ 15,725,253
8.	Expected Unfunded Actuarial Liability at End of Year [1. + 2. + 3. – 4. - 5. + 6.+ 7.]	$ 142,870,406
9.	Actual Unfunded Actuarial Liability at End of Year, not less than zero	$ 140,967,744
10.	Actuarial Gain / (Loss) [8. – 9.]	$ 1,902,662
	(a) Liability Gain / (Loss)	$ 1,139,376
	(b) Asset Gain / (Loss)	$ 763,286

SECTION V – CONTRIBUTIONS

Table V-5
Schedule of Amortizations Required for Minimum Required Contribution
as of January 1, 2020

Type of Base	Date Established	1/1/2020 Outstanding Balance	Remaining Amortization Years [1]	Beginning of Year Amortization Amount
CHARGES				
1. Change in Actuarial Cost Method	01/01/1984	$ 281,787	1	$ 281,787
2. Increase in Employer Contributions	01/01/1986	3,096	1	3,096
3. Plan Amendments	01/01/1986	111,332	1	111,332
4. Increase in Employer Contributions	01/01/1987	177,553	2	91,779
5. Change in Actuarial Assumptions	01/01/1988	22,321	3	7,949
6. Increase in Employer Contributions	01/01/1988	292,141	3	104,038
7. Increase in Employer Contributions	01/01/1989	449,643	4	124,063
8. Increase in Employer Contributions	01/01/1990	465,170	5	106,029
9. Increase in Employer Contributions	01/01/1991	865,315	6	169,663
10. Plan Amendments	01/01/1992	25,964	7	4,503
11. Increase in Employer Contributions	01/01/1992	381,955	7	66,236
12. Change in Actuarial Cost Method	01/01/1992	171,398	1	171,398
13. Change in Actuarial Assumptions	01/01/1992	1,110,848	7	192,637
14. Increase in Employer Contributions	01/01/1993	661,891	8	103,594
15. Increase in Employer Contributions	01/01/1994	876,416	9	125,718
16. Increase in Employer Contributions	01/01/1995	761,800	10	101,367
17. Plan Amendments	01/01/1996	448,565	11	55,906
18. Increase in Employer Contributions	01/01/1996	859,677	11	107,144
19. Plan Amendments	01/01/1997	30,236	12	3,558
20. Increase in Employer Contributions	01/01/1997	942,588	12	110,910
21. Increase in Employer Contributions	01/01/1998	419,869	13	46,951
22. Plan Amendments	01/01/1998	7,622,932	13	852,421
23. Increase in Employer Contributions	01/01/1999	1,343,221	14	143,543
24. Plan Amendments	01/01/1999	3,031,880	14	324,000
25. Increase in Employer Contributions	01/01/2000	345,535	15	35,456
26. Plan Amendments	01/01/2001	297,970	16	29,479
27. Change in Actuarial Assumptions	01/01/2001	551,620	16	54,573

SECTION V – CONTRIBUTIONS

Table V-5
Schedule of Amortizations Required for Minimum Required Contribution as of January 1, 2020

Type of Base	Date Established	1/1/2020 Outstanding Balance	Remaining Amortization Years [1]	Beginning of Year Amortization Amount
CHARGES				
28. Experience Loss	01/01/2001	$ 79,557	1	$ 79,557
29. Increase in Employer Contributions	01/01/2001	1,856,649	16	183,683
30. Plan Amendments	01/01/2002	481,951	17	46,135
31. Increase in Employer Contributions	01/01/2002	1,698,294	17	162,568
32. Experience Loss	01/01/2002	383,228	2	198,094
33. Increase in Employer Contributions	01/01/2003	1,910,252	18	177,480
34. Experience Loss	01/01/2003	2,322,775	3	827,194
35. Increase in Employer Contributions	01/01/2004	1,726,264	19	156,095
36. Experience Loss	01/01/2004	2,138,167	4	589,950
37. Increase in Employer Contributions	01/01/2005	1,956,679	20	172,614
38. Experience Loss	01/01/2005	2,182,429	5	497,452
39. Recognized Portion of the 2008 ENIL	01/01/2009	37,653,124	18	3,498,313
40. Bifurcation Base	01/01/2009	6,286,715	9	901,800
41. Bifurcation Base	01/01/2010	3,536,609	5	806,118
42. Recognized Portion of the 2008 ENIL	01/01/2011	5,445,651	18	505,950
43. Method Change	01/01/2011	2,064,947	1	2,064,947
44. Recognized Portion of the 2008 ENIL	01/01/2012	17,435,615	18	1,619,925
45. Assumption Change	01/01/2012	9,081,761	7	1,574,907
46. Recognized Portion of the 2008 ENIL	01/01/2013	5,828,197	18	541,492
47. Recognized Portion of the 2008 ENIL	01/01/2014	3,676,923	18	341,619
48. Experience Loss	01/01/2015	3,704,629	10	492,949
49. Experience Loss	01/01/2016	5,873,917	11	732,082
50. Experience Loss	01/01/2017	2,211,704	12	260,241
51. Experience Loss	01/01/2018	1,847,665	13	206,612
52. Assumption Change	01/01/2020	15,725,253	15	1,613,596
TOTAL CHARGES		$ 159,661,678		$ 21,780,503

SECTION V – CONTRIBUTIONS

Table V-5
Schedule of Amortizations Required for Minimum Required Contribution
as of January 1, 2020

Type of Base	Date Established	1/1/2020 Outstanding Balance	Remaining Amortization Years	Beginning of Year Amortization Amount
CREDITS				
1. Change in Actuarial Assumptions	01/01/1994	$ 153,135	4	$ 42,252
2. Change in Actuarial Assumptions	01/01/1996	1,585,452	6	310,861
3. Change in Actuarial Assumptions	01/01/1999	137,966	9	19,791
4. Change in Actuarial Assumptions	01/01/2002	765,113	12	90,027
5. Experience Gain	01/01/2006	594,143	1	594,143
6. Experience Gain	01/01/2007	429,882	2	222,210
7. Experience Gain	01/01/2008	1,739,523	3	619,484
8. Method Change	01/01/2009	11,697,211	19	1,057,701
9. Recognized Portion of the 2008 ENIL	01/01/2010	6,712,160	18	623,620
10. Plan Amendment	01/01/2010	9,796,190	5	2,232,897
11. Bifurcation Base	01/01/2011	4,096,731	6	803,249
12. Bifurcation Base	01/01/2012	1,880,753	7	326,149
13. Bifurcation Base	01/01/2013	10,544,184	8	1,650,291
14. Bifurcation Base	01/01/2014	2,825,350	9	405,283
15. Experience Gain	01/01/2019	754,378	14	80,616
16. Experience Gain	01/01/2020	1,902,662	15	195,236
TOTAL CREDITS		55,614,833		$ 9,273,810
NET CHARGE		**$ 104,046,845**		**$ 12,506,693**

SECTION V – CONTRIBUTIONS

Table V-6
Accumulated Reconciliation Account and Balance Test
as of January 1, 2020

1. Amount due to Additional Interest Charges in prior years	$	0
2. Amount due to Additional Funding Charges in prior years		NA
3. Reconciliation Account at Start of Year [1. + 2.]	$	0
4. Net Outstanding Amortization Bases	$	104,046,845
5. Funding Deficiency at Start of Year	$	36,920,899
6. Unfunded Actuarial Liability at Start of Year from Funding Equation [4. – 3. + 5.]	$	140,967,744
7. Actuarial Liability at Start of Year	$	295,591,424
8. Actuarial Value of Assets at Start of Year	$	154,623,680
9. Unfunded Actuarial Liability at Start of Year from Liability Calculation [7. – 8., Limited to Zero]	$	140,967,744

The Fund passes the Balance Test because line 6. equals line 9.

SECTION V – CONTRIBUTIONS

Table V-7
Development of Full Funding Limitation
for Plan Year Starting January 1, 2020

	Minimum	Maximum
1. Entry Age Actuarial Liability Calculation		
a. Actuarial Liability	$ 295,591,424	$ 295,591,424
b. Normal Cost with Expenses	1,154,207	1,154,207
c. Lesser of Market Value and Actuarial Value of Assets	154,623,680	154,623,680
d. Credit Balance/(Funding Deficiency) at Start of Year	(36,920,899)	0
e. Actuarial Liability Full Funding Limit [a. + b. – c. + d.] x 1.07, limited to zero	$ 112,565,126	$ 152,070,488
2. Full Funding Limit Overide (RPA 1994)		
Interest Rate used to Calculate Current Liability	2.95%	2.95%
a. RPA 1994 Current Liabilty at Start of Year	$ 472,892,075	$ 472,892,075
b. Present Value of Benefits Estimated to Accrue during Year	2,661,368	2,661,368
c. Expected Benefit Payments	21,696,748	21,696,748
d. Net Interest on a., b. and c. at Current Liability Interest Rate	13,711,126	13,711,126
e. Expected Current Liability at End of Year, [a. + b. – c. + d.]	467,567,821	467,567,821
f. 90% of e.	420,811,039	420,811,039
g. Actuarial Value of Assets at Start of Year	154,623,680	154,623,680
h. Expected Expenses	366,579	366,579
i. Net Interest on c., g. and h. at Valuation Interest Rate	10,051,454	10,051,454
j. Estimated Value of Assets, [g. – c. – h. + i.]	142,611,807	142,611,807
k. RPA 1994 Full Funding Limit Override	$ 278,199,232	$ 278,199,232
3. Full Funding Limitation at End of Year, greater of 1e. and 2k.	$ 278,199,232	$ 278,199,232

SECTION VI – WITHDRAWAL LIABILITY

The Multi-Employer Pension Plan Amendments Act of 1980 (MPPAA) provides that a contributing employer who withdraws from a multi-employer pension plan, either partially or totally, will be liable to the fund for a share of the fund's Unfunded Vested Benefits (UVB) that exist as of the end of the plan year prior to the year in which the withdrawal occurs. The UVB is apportioned using the Presumptive Method as described in ERISA §4211(b)(1).

Vested Benefits are the benefits that the Fund cannot take away from participants. Vested Benefits belong to two groups of participants: those former employees who have retired and are currently receiving retirement benefits; and those employees and former employees who have not yet retired, but who have accumulated enough service to earn the right to receive a benefit when they do retire even if their employment is terminated prior to retirement.

The total liability for all Vested Benefits as of December 31, 2019 is $288,102,507. This liability has been determined using the actuarial assumptions shown in Appendix C for funding purposes. As of December 31, 2019, the Market Value of Assets applicable to the use of the Presumptive Method of allocating UVB was $161,910,558. Because the present value of Vested Benefits exceeds the assets of the Fund, there are Unfunded Vested Benefits as of December 31, 2019. Consequently, a participating employer who withdraws from the Fund during the plan year beginning January 1, 2020 may have a Withdrawal Liability, which will be based on its share of the Unfunded Vested Benefits.

In addition, a withdrawing employer will be assessed a portion of the Affected Benefit liability in accordance with the provisions of the Pension Protection Act. The Affected Benefit liability arose when the Fund removed certain Adjustable Benefits effective January 1, 2010. The unamortized balance of the Affected Benefit liability at December 31, 2019 is $174,977.

SECTION VII – FASB ASC 960 DISCLOSURES

Table VII-1
Present Value of Accumulated Benefits as of January 1, 2020
in Accordance with FASB ASC 960

		Amounts	Counts
1. Actuarial Present Value of Vested Benefits			
For Retirees and Beneficiaries	$	170,062,795	1,030
Terminated Vesteds		79,970,379	703
Active Participants		38,069,333	244
Total Vested Benefits	$	288,102,507	1,977
2. Non-vested Benefits	$	2,499,322	50
3. Present Value of Expected Administrative Expenses[1]	$	4,636,103	
4. Accumulated Benefits	$	295,237,932	2,027
5. Market Value of Assets	$	161,910,558	
6. Funded Ratios			
Vested Benefits		56%	
Accumulated Benefits		55%	

Reconciliation of Present Value of Accumulated Benefits

1. Actuarial Present Value at Start of Prior Year	$	275,242,089
2. Increase (Decrease) over Prior Year due to:		
Benefit Accruals	$	1,091,725
Benefit Payments		(20,567,862)
Increase for Interest		21,299,818
Liability Experience (Gains)/Losses		(1,155,420)
Changes in Assumptions		14,691,479
Plan Amendments		0
Total	$	15,359,740
3. Actuarial Present Value at End of Prior Year (w/o Administrative Expenses)	$	290,601,829
4. Present Value of Expected Administrative Expenses[1]	$	4,636,103
5. Actuarial Present Value at End of Prior Year (w/ Administrative Expenses)	$	295,237,932

[1] The present value of expected administrative expenses is equal to 1.60% of the Accrued Liability.

APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided by Associated Administrators LLC (AA). Cheiron did not audit any of the data; however, the data was reviewed to ensure that it complies with generally accepted actuarial standards. The data is as of January 1, 2020.

The following is a list of data charts contained in this section:

- Age/Service Distribution for Active Participants
- Counts and Average Benefit Amount by Age for Retirees, Beneficiaries, and Disabled Participants
- Counts and Average Benefit Amount by Age for Terminated Vested Participants

Table A-1
Age/Service Distribution of Active Participants as of January 1, 2020

	COMPLETED YEARS OF CREDITED SERVICE							
AGE	0-4	5-9	10-14	15-19	20-24	25-29	30 & Up	Total
Under 25	9	0	0	0	0	0	0	9
25-29	6	3	0	0	0	0	0	9
30-34	11	15	8	0	0	0	0	34
35-39	11	13	10	8	1	0	0	43
40-44	6	4	13	6	6	0	0	35
45-49	1	3	13	5	7	3	0	32
50-54	5	3	7	9	15	6	12	57
55-59	2	3	11	10	5	7	10	48
60-64	1	1	4	2	6	3	2	19
65 & Up	1	1	3	1	0	0	2	8
Total	53	46	69	41	40	19	26	**294**

Average Age = **46.6** Average Service = **14.5**

APPENDIX A – MEMBERSHIP INFORMATION

Table A-2
Age/Benefit Distribution of Inactive Participants as of January 1, 2020

PENSIONERS AND BENEFICIARIES RECEIVING BENEFITS

	Normal, Early Deferred Vested Retirements		Surviving Spouses and Beneficiaries Receiving Benefits		Total	
Age	**Number**	**Monthly Benefit**	**Number**	**Monthly Benefit**	**Number**	**Monthly Benefit**
Under 55	12	$ 49,294	2	$ 952	14	$ 50,246
55-59	53	195,044	7	5,388	60	200,432
60-64	235	605,380	18	7,345	253	612,725
65-69	211	395,497	23	11,346	234	406,843
70-74	156	193,135	26	14,268	182	207,403
75-79	135	132,944	24	13,180	159	146,124
80 & Over	103	86,150	25	7,269	128	93,419
Total	905	$ 1,657,444	125	$ 59,748	**1,030**	**$ 1,717,192**

DEFERRED VESTED PARTICIPANTS AND SURVIVING SPOUSES ENTITLED TO FUTURE BENEFITS

Age	**Number**	**Monthly Benefit Payable at Normal Retirement Date**
Under 45	112	$ 117,125
45-49	107	144,713
50-54	184	383,392
55-59	224	461,291
60-64	53	53,042
65 & Over	23	11,248
Total	703	$ 1,170,811

APPENDIX A – MEMBERSHIP INFORMATION

Table A-3
Participant Reconciliation from January 1, 2019 to January 1, 2020

	Actives	Terminated Vested	Deferred Spouses	Retired	QDROs	Spouses	Total
1. **January 1, 2019 Valuation**	**301**	**722**	**16**	**849**	**22**	**130**	**2,040**
2. Additions							
a. New entrants	25						25
b. New spouse							0
c. New QDRO					6		6
d. Pickups						2	2
Total Additions	**25**	**0**	**0**	**0**	**6**	**2**	**33**
3. Reductions							
a. Terminated - not vested	(4)						(4)
b. Non-Participating							0
c. Lump sum							0
d. Deaths without beneficiary	(2)	(1)	(1)	(24)		(8)	(36)
e. Data corrections, missing			(3)	(1)	(1)	(1)	(6)
Total Reductions	**(6)**	**(1)**	**(4)**	**(25)**	**(1)**	**(9)**	**(46)**
4. Changes in status							
a. Terminated - vested	(16)	16					0
b. Returned to work	3	(3)					0
c. Retired	(11)	(44)		55			0
d. Died with beneficiary	(2)	(5)	6	(1)		2	0
e. Data corrections							0
Total Changes	**(26)**	**(36)**	**6**	**54**	**0**	**2**	**0**
5. **January 1, 2020 Valuation**	**294**	**685**	**18**	**878**	**27**	**125**	**2,027**

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

This summary of plan provisions provides an overview of the major provisions of the pension fund used in the actuarial valuation. It is not intended to replace the more precise language of the plan document and is not to be relied upon for calculating participant benefits.

1. Eligibility

Any employee on whose behalf contributions are made to the pension plan is eligible to participate in the Fund.

2. Normal Retirement

Eligibility: Age 60 with five years of service.

For service after the adoption or imposition of a Rehabilitation Benefit Schedule, the normal retirement age has been increased to age 62 with five years of service.

Amount: Percentage of Contributions

For service prior to the adoption or imposition of a Rehabilitation Benefit Schedule:

A monthly life annuity reducing to 55% of the original amount after 60 months, equal to (a) 4.17% of all contributions required to be made on a participant's behalf on and after January 1, 1978 plus (b) X% of all contributions required to be made on a participant's behalf prior to January 1, 1978, where "X" is determined from the following table:

Participant's Age on January 1, 1978	X%	Participant's Age on January 1, 1978	X%
60 or over	12.0	49	7.6
59	11.6	48	7.2
58	11.2	47	6.8
57	10.8	46	6.4
56	10.4	45	6.0
55	10.0	44	5.6
54	9.6	43	5.2
53	9.2	42	4.8
52	8.8	41	4.4
51	8.4	40 and under	4.17
50	8.0		

For those employers who elected through a collective bargaining agreement to make a supplemental contribution beginning January 1, 1998, the monthly life annuity above reduces to 55% of the original amount after 96 months instead of 60.

Effective for participants who earned an hour of service on or after January 1, 1999, 24 months is added to the number of months described above (i.e., 60 months and 96 months for a total of 84 and 120 months, respectively).

For service after the adoption or imposition of a Rehabilitation Benefit Schedule:

Preferred Schedule: 2.0% of all contributions required to be made on a participant's behalf on and after the date of adoption of the Preferred Schedule, reducing to 1.0% after the pension has been in effect for 60, 84, 96, or 120 months.

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

Default Schedule: 1.0% of all contributions required to be made on a participant's behalf on and after the date of adoption or imposition of the Default Schedule.

3. Early Retirement Benefit

Eligibility: On completion of 30 years of service with the Fund.

Amount: Accrued normal retirement benefit payable immediately.

4. Postponed Retirement Benefit

A participant who elects to postpone his retirement of contributions benefit beyond his normal retirement date is entitled to a postponed retirement benefit, in lieu of his normal retirement benefit, in the amount of the normal retirement benefit calculated as if he had reached his normal retirement date on the day he actually retires.

5. Termination Benefit

Eligibility: Five credited years of service for vesting.

Amount: A deferred annuity in the amount of the participant's accrued normal benefit at termination commencing at the participant's normal retirement age.

6. Death Benefits

Pre-Retirement Lump Sum Death Benefit

Eligibility: Five continuous years of participation in the pension plan, and has had at least 40 weeks' payments into the trust fund by an employer.

Amount: $2.00 per paid week up to a maximum of $2,000 reduced by any disability benefits paid.

Eliminated after the adoption or imposition of a Rehabilitation Benefit Schedule.

Pre-Retirement Spouse's Pension

Eligibility: Available only to married participants who are eligible for a termination benefit, including vested terminated participants.

Amount: A life annuity to the participant's lawful spouse in the amount of the surviving spouse's benefit that would have been provided under the qualified joint and survivor annuity payable at what would have been the participant's earliest retirement date.

The pre-retirement spouse's benefit will be paid in addition to the lump sum death benefit.

APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

7. Normal Form of Pension

For participants who are married as of the normal retirement date, the normal retirement benefit is automatically payable as a joint and survivor annuity actuarially equivalent to the above benefit. The normal form of pension payable to a married employee who does not elect otherwise will be an actuarially reduced pension on the Joint and 50% Survivor basis.

8. Effective Date of Plan

August 15, 1965. Restated as of January 1, 2002.

9. Last Amended

Restated as of January 1, 2009 and executed on December 17, 2009. The Rehabilitation Plan was last amended in 2014 to adopt reasonable measures to forestall insolvency.

10. Contributions

Employee: None permitted or required.

Employer: On an hourly or weekly basis, on behalf of participating employees, as specified in the applicable collective bargaining agreement.

11. Changes since Last Valuation

None.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Rates of Investment Return

Funding purposes: 7.00%

Current Liability under RPA 1994: 2.95%

This interest rate is the top of the corridor established by law.

All investment returns are net of investment expenses.

2. Rates of Mortality

Funding:
SOA RP-2014 Blue Collar Mortality adjustment to 2006, generationally projected using scale MP-2019

Current Liability under RPA 1994:
The 2020 Static Mortality Table as prescribed under IRS Regulations.

3. Rates of Disability

None assumed.

4. Rates of Turnover

Double the combination of Sarason's Advanced Pension Tables. Sample rates:

Age	Rate
20	24.77%
22	22.62
24	20.47
25	19.40
26	18.02
28	15.25
30	12.49
35	8.21
40	5.24
45	2.57
50	0.00

5. Rates of Retirement

For individuals commencing from Active status:

	Less than 30 Years of Service		30 Years of Service	Over 30 Years of Service
Age	NRA = 60	NRA = 62		
<60	0%	0%	35%	15%
60	25%	0%	100%	100%
61	15%	0%	100%	100%
62	15%	25%	100%	100%
63 – 64	15%	15%	100%	100%
65+	100%	100%	100%	100%

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

6. Rates of Retirement (continued)

For individuals commencing from Inactive status:

Age	NRA of 60	NRA of 62
<60	0%	0%
60	50%	0%
61	25%	0%
62	25%	50%
63-64	25%	25%
65+	100%	100%

7. Marriage Rates

Percentage Married: Males – 61%
Females – 61%

Age Differences: Males are assumed to be three years older than spouse.

8. Payment Form Elections

Level Income Option – 65%
Single Life or Certain Annuity – 15%
Joint & Survivor Annuity – 20%

9. Administrative Expenses

$366,579 payable at the beginning of the year. Projected expenses incorporate an expense inflation assumption of 2% per year.
For financial disclosure under FASB ASC 960, the present value of future administrative expense is 1.60% of accrued liability. This amount is based on future projected cash flows of $180.85 per participant, mid-year, that increase 2% per year for inflation.

10. Active Participants

All non-retired participants who have hours worked during the plan year ending December 31, 2019.

11. Future Hours Worked By Active Participants

Each active participant will work average annual hours worked in the past three years, excluding the year of entry. No participant is assumed to work less than 870 hours per year.

12. Contribution Rate Used for Determination of Minimum Flat Benefit

The contribution rate in effect on January 1, 2020.

13. Contribution Rate Used for Determination of Percentage of Contributions Benefit

The contribution rate in effect on January 1, 2020.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

14. Participant Data

This report is based upon employee data furnished by the Fund Administrator. All non-retired participants who have hours worked during the plan year ending December 31, 2019 are assumed to be active participants as of January 1, 2020 unless identified as having been terminated.

15. Assets

Provided by the independent auditors' report as of December 31, 2019.

The Actuarial Value of Assets is based on the market value with an adjustment to smooth appreciation or depreciation in the market value over the past five years.

80% of the net appreciation or depreciation for the most recently completed plan year is removed from the value of the assets, 60% of the appreciation or depreciation for the year prior to that is removed, etc., until the fifth year prior to this plan year for which none of the appreciation or depreciation is removed. The actuarial value of assets is adjusted, if necessary, to be within 80% to 120% of the market value of the assets.

16. Rehabilitation Plan Benefit Schedule

In preparing our report and valuation results, all participating employers were valued under the Preferred Schedule as of January 1, 2020.

17. Choice of Assumptions

Economic: The expected investment return was chosen by modeling the Fund's current asset allocation with the Horizon Investment Survey. The expected 10-year return is 6.53% and the expected 20-year return is 7.34%. Historically the Fund has averaged 9.6% annual return over the past 10 years. Taking into account the historical returns and forward looking expectations, a long-term rate return of 7% is reasonable.

Demographic: The demographic assumptions were reviewed and updated to better reflect actual experience.

18. Changes in Assumptions since Last Valuation

The assumed retirement and mortality rates, as well as the forms of payment and marital assumptions were updated to better reflect actual experience.

The discount rate assumption was decreased from 8.00% to 7.00% to better reflect investment expectations.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

For funding calculations, the administrative expense assumption was changed from $353,198 to $366,579.

For financial disclosure under FASB Topic ASC 960, the present value of future administrative expense is based on future mid-year cash flows of $180.85 per participant that increase 2% per year for inflation. Last year we used $173.14 per participant, and a 3% inflation assumption.

The RPA '94 Current Liability interest rate was changed from 3.06% to 2.95% and the RPA '94 Current Liability mortality table was changed from the IRS 2019 Static Mortality Table to the IRS 2020 Static Mortality Table to comply with appropriate guidance.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

B. Actuarial Methods

1. Asset Valuation Method

The Actuarial Value of Assets is determined in accordance with Section 3.16 of Revenue Procedure 2000-40 using a five-year smoothing period. Specifically, the actuarial value of assets as of January 1, 2006 is set equal to the market value of assets. For each subsequent plan year, the actuarial value shall be the market value minus a decreasing fraction (4/5, 3/5, 2/5, 1/5) of each gain or loss for each of the preceding four plan years except for 2008 market losses which are recognized at 10% a year due to funding relief. Gains or losses prior to January 1, 2006 are ignored.

The resulting actuarial value of assets is then limited to be no greater than 120% and no less than 80% of the market value of assets on the valuation date.

2. Funding Method: Entry Age Normal Cost Method

Under the Entry Age Normal Cost Method, the individual Entry Age Normal cost is determined for each participant by calculating the level annual contribution required to fund that individual's expected benefits based on the current plan provisions over the participant's expected active working lifetime with the Fund at entry.

At the valuation date, the present value of future normal cost is calculated for each individual participant by multiplying the Entry Age Normal cost by the present value of the participant's expected future active working lifetime with the Fund. The cost for each participant is then summed to yield the present value of future normal costs.

The excess of the present value of future benefits for all individuals at the valuation date over the present value of future normal costs is called the Actuarial Liability, or past service liability.

The excess, if any, of the actuarial liability over the actuarial value of assets is known as the unfunded accrued liability. If the actuarial value of assets exceeds the actuarial liability, the Fund may have a surplus.

3. PRA 2010 Funding Relief

The Fund's Board of Trustees elected funding relief under §431(b)(8) of the Code and §304(b)(8) of ERISA, specifically:

- The "special amortization rule," which allows the Fund's investment losses for the plan year ended December 31, 2008 be separately amortized over 29 years.

4. Changes in Actuarial Methods Since Last Valuation

None.

APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

5. Reliance on Models

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

Projections in this report were developed using *P-Scan*, our proprietary tool for developing deterministic projections to illustrate the impact of changes in assumptions, methods, plan provisions, or actual experience (particularly investment experience) on the future financial status of the plan.

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