

Mid-Atlantic UFCW & Participating Employers Pension Fund

**Actuarial Valuation Report
as of January 1, 2020**

**Produced by Cheiron
January 2021**

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January 15, 2021

Mid-Atlantic UFCW & Participating Employers Pension Fund Trustees
c/o Mrs. Linda DuVall
Associated Administrators, LLC
4301 Garden City Drive, Suite 201
Landover, Maryland 20785

Dear Trustees:

At your request, we have performed the January 1, 2020 Actuarial Valuation of the Mid-Atlantic UFCW & Participating Employers Pension Fund (the Fund). This report contains information on the Fund's assets and liabilities and also discloses contribution levels, including the minimum required amount as mandated by Federal law.

In the Foreword, 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 and rely on future fund experience conforming to the underlying assumptions. Future results may differ significantly from the current results presented in this report due to such factors as the following: fund experience differing from that anticipated by the assumptions; changes in assumptions; and changes in plan provisions or applicable law.

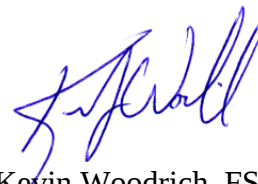
This report and its contents have been prepared in accordance with generally recognized and accepted actuarial principles and practices and our understanding of the Code of Professional Conduct and applicable Actuarial Standards of Practice set out by the Actuarial Standards Board as well as applicable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

The purpose of this report is to present the annual actuarial valuation of the Mid-Atlantic UFCW & Participating Employers Pension Fund. This report is for the use of the Fund and its auditors in preparing financial reports in accordance with applicable law and accounting requirements. Other users of this report are not intended users as defined in the Actuarial Standards of Practice, and Cheiron assumes no duty or liability to any other user.

Sincerely,
Cheiron

A handwritten signature in blue ink, appearing to read "Gene Kalwarski".

Gene M. Kalwarski, FSA, EA, MAAA
Principal Consulting Actuary

A handwritten signature in blue ink, appearing to read "Kevin Woodrich".

Kevin Woodrich, FSA, EA, MAAA
Principal Consulting Actuary

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
ACTUARIAL VALUATION AS OF JANUARY 1, 2020**

FOREWORD

Cheiron has performed the Actuarial Valuation of the Mid-Atlantic UFCW & Participating Employers Pension Fund 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 and indicate historical trends in the financial condition 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 valuation and compares this year's results to last year's results.

Section II presents risk factors to consider that may significantly affect the Fund's future financial condition in accordance with the requirements under the Actuarial Standards of Practice No 51 (ASOP 51).

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 information 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. There have been no changes to the Fund since the prior valuation.

In preparing our report, we relied without audit on information (some oral and some written) supplied by Associated Administrators LLC, Investment Performance Services, Inc., and Calibre CPA Group, PLLC. This information includes, but is not limited to, plan provisions, employee data, and financial information. We performed an informal examination of the obvious characteristics of the data for reasonableness and consistency in accordance with Actuarial Standard of Practice No. 23.

The actuarial assumptions analyzed individually, represent our best estimates for the future experience of the Fund. The results of this report are dependent upon future experience conforming to these assumptions. To the extent that future experience deviates from the actuarial assumptions, the true cost of the Fund could vary from our results.

Cheiron utilizes ProVal, an actuarial valuation software leased from Winklevoss Technologies for the intended purpose of calculating the liabilities and projected benefit payments. We have examined the reasonableness of the input data and assumptions, reviewed sample calculations for accuracy, reconciled the actuarial gain/loss, and find the aggregate results reasonable and appropriate. We are not aware of any material

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ACTUARIAL VALUATION AS OF JANUARY 1, 2020**

FOREWORD

inconsistencies, unreasonable output resulting from the aggregation of assumptions, material limitations, or known weaknesses that would affect these valuation results.

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

MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
ACTUARIAL VALUATION AS OF JANUARY 1, 2020

SECTION I – SUMMARY

The table below sets out the principal results of this year's valuation and compares them to last year's results.

Table I-1 Summary of Principal Results				
		January 1, 2019	January 1, 2020	Change
Participant Counts				
Actives	Tier I	761	693	(8.9%)
	Tier II	15,739	15,331	(2.6%)
	Total	16,500	16,024	(2.9%)
Terminated Vesteds		3,201	3,627	13.3%
In Pay Status		1,427	1,719	20.5%
Total		21,128	21,370	1.1%
Financial Information				
(1) Market Value of Assets (MVA)		\$ 95,274,059	\$ 127,896,405	34.2%
(2) Actuarial Value of Assets (AVA)		\$ 105,551,588	\$ 127,140,811	20.5%
(3) Total Present Value of Future Benefits		\$ 168,672,511	\$ 182,684,370	8.3%
(4) Actuarial Liability		\$ 97,582,034	\$ 113,907,699	16.7%
(5) Surplus / (Unfunded) Actuarial Liability [(2) - (4)]		\$ 7,969,554	\$ 13,233,112	
(6) Funding Ratio on AVA Basis [(2) ÷ (4)]		108.2%	111.6%	3.5%
(7) Accrued Liability / PPA Liability		\$ 97,582,034	\$ 113,907,699	16.7%
(8) Surplus / (Unfunded) Accrued Benefit [(2) - (7)]		\$ 7,969,554	\$ 13,233,112	
(9) Funding Ratio on AVA Basis [(2) ÷ (7)]		108.2%	111.6%	3.5%
(10) Funding Ratio on MVA Basis [(1) ÷ (7)]		97.6%	112.3%	14.6%
(11) Present Value of Vested Benefits for Withdrawal Liability		\$ 92,729,049	\$ 108,474,896	17.0%
Contributions and Cash Flows				
Employer Contributions (Actual / Estimated)		\$ 18,616,224	\$ 20,000,000	7.4%
ERISA Minimum Required Contribution		\$ 15,496,237	\$ 15,422,807	(0.5%)
ERISA Maximum Deductible Contribution		\$ 275,317,398	\$ 268,333,882	(2.5%)
ERISA Credit Balance at Start of Year		\$ 21,208,468	\$ 27,399,345	
Prior Year Benefit Payouts		\$ 1,780,503	\$ 2,314,973	
Prior Year Administrative Expenses		\$ 1,193,904	\$ 1,306,972	
Prior Year Total Investment Return (Net of Investment Expenses)		\$ (4,296,491)	\$ 17,628,067	

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SECTION I – SUMMARY

General Comments

- The Market Value of Assets (MVA) returned approximately 17.2% compared to the prior year's 7.5% expected return for 2019. This return is net of investment expenses.
- The MVA grew \$32.6 million during 2019 due to employer contributions exceeding benefit payments and administrative expenses by \$15.0 million and a \$17.6 million increase from net investment performance.
- The Fund uses an Actuarial Value of Assets (AVA) which smooth annual investment gains or losses over a period of five years. Despite the favorable investment return on market value, the Actuarial Value of Assets returned 5.8% for the year primarily due to the continued smoothing of the prior years' losses. This resulted in a \$1.9 million actuarial investment loss when compared to the prior year's 7.5% expected return.
- The Fund experienced a liability gain of \$1.2 million (1.2% of the liability as of last year). The majority of this gain is attributable to actives retiring at rates that vary from the underlying assumption.
- Combining the actuarial investment loss (on an Actuarial Value of Assets basis) and liability gain produces a net actuarial experience loss of \$0.7 million. This loss will increase the annual Minimum Required Contribution by about \$0.1 million for the next 15 years.
- The Fund's funding ratio (Actuarial Value of Assets as a percentage of Actuarial Liability) increased from 108.2% as of January 1, 2019 to 111.6% as of January 1, 2020. Based on Market Value of Assets, the funding ratio increased from 97.6% as of January 1, 2019 to 112.3% as of January 1, 2020.
- The Fund's Credit Balance increased from \$21.2 million as of December 31, 2018, to \$27.4 million as of December 31, 2019, mainly because of the level of contributions.
- The Fund has no Unfunded Vested Benefits as of December 31, 2019. Assuming the absence of a mass withdrawal, no Withdrawal Liability would be assessed to any employer completely withdrawing in 2020.

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ACTUARIAL VALUATION AS OF JANUARY 1, 2020**

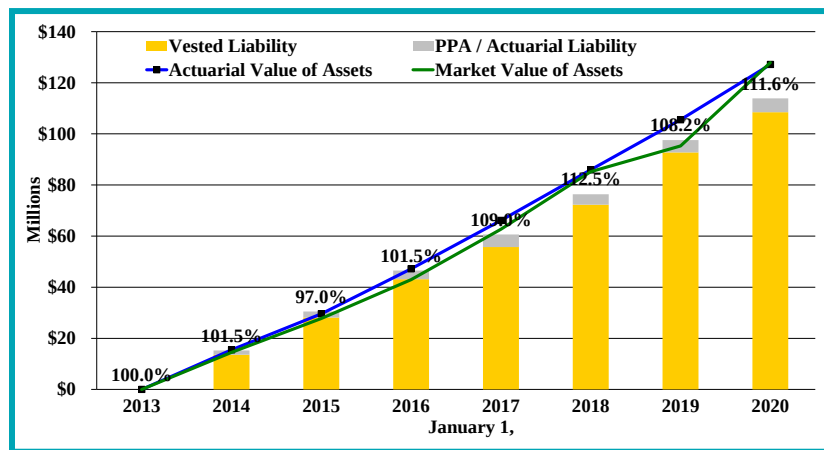
SECTION I – SUMMARY

Historical Summary

It is important to take a step back from the results and view them in the context of the Fund's recent history. On the next few pages, we present a series of charts that display key results from the valuations since the Fund's establishment on January 1, 2013.

Assets & Liabilities

The gold bars in the chart below show the Present Value of Vested Accrued Benefits while the gray bars add the additional value of non-Vested benefits that make up the Actuarial Liability based on the Unit Credit Cost Method. The blue line is the Actuarial Value of Assets (AVA) and the green line is the Market Value of Assets (MVA). The percentages shown on the top are ratios of the Actuarial Value of Assets to the Actuarial Liability.



The Fund continues to have positive net cash flows, as employer contributions have exceeded the benefits paid since the Fund's inception. Contributions have also, on average, exceeded the cost of benefit accruals. In addition to the favorable investment return in 2019, this overall cash flow position has contributed substantially to the funding ratio remaining above 100%.

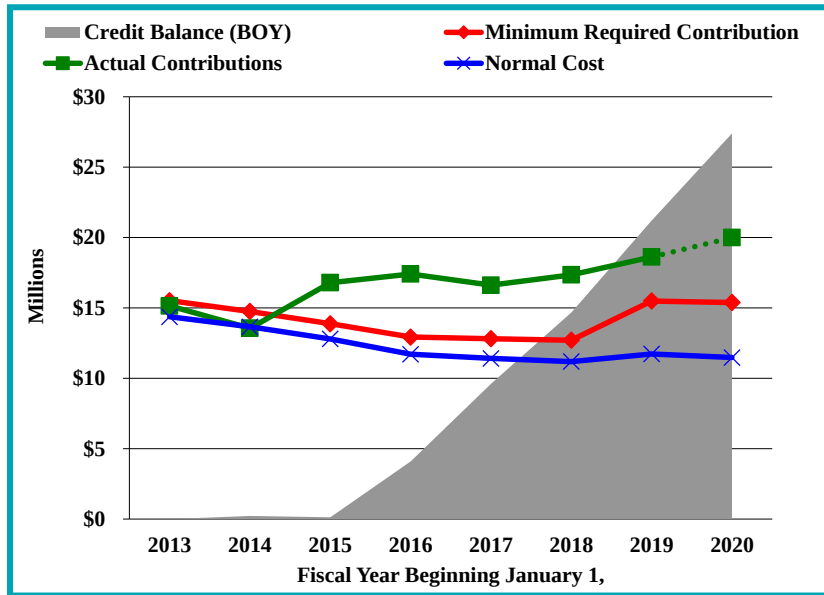
Minimum Funding

The next chart shows historical contributions paid to the Fund (green line) relative to the ERISA Minimum Required Contribution (red line) before considering the Credit Balance offset (gray area). The Normal Cost, which is the value of the benefits expected to be earned in the upcoming plan year, is shown by the blue line. This is the primary component of the Minimum Required Contribution.

Over time, the Credit Balance will grow if contributions and interest on it exceed the current year's charges (red line). It will decrease if the opposite is true.

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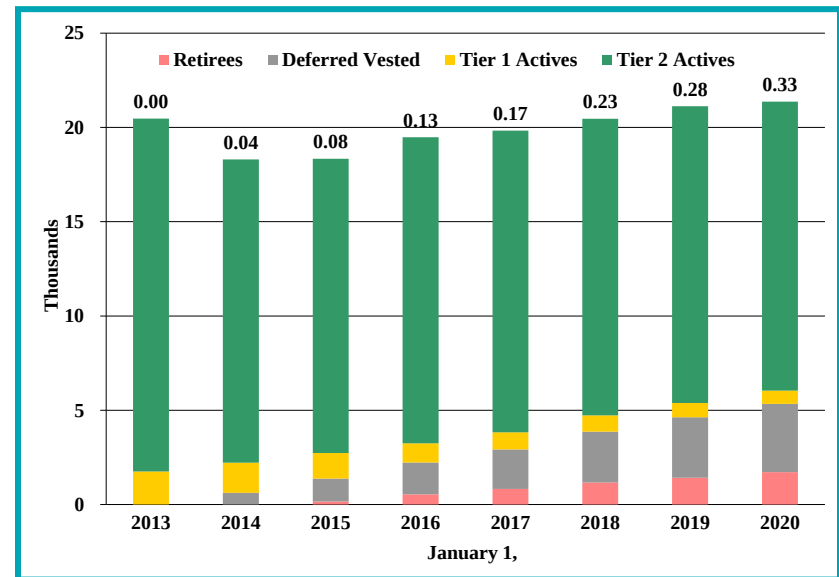
SECTION I – SUMMARY



The Credit Balance grew to \$27.4 million as of December 31, 2019 due to employer contributions exceeding the Minimum Required Contribution in 2019 and interest credited to the Credit Balance for the year. Estimated contributions for 2020 (green dotted line) are once again expected to exceed the Minimum Required Contribution, which decreased slightly.

Participation

This last historical chart shows the participants of the Fund at successive valuations. The numbers above the bars on the chart indicate the ratio of inactive participants to active participants (the “support ratio”) at each valuation.



As illustrated, the support ratio has increased over the period shown. As a new fund, there were no inactives as of the Fund’s effective date of January 1, 2013. Therefore, the support ratio has increased as the number of inactives increases despite the number of actives remaining relatively stable in recent years.

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

The current and projected results contained in this report are based on a set of assumptions about the future economic experience and demographic experience. In our opinion, these assumptions are our best estimate of future experience. Nonetheless, it is important to realize that future experience will deviate, sometimes significantly, from the assumptions.

The annual differences between the actual and expected experience produce an actuarial gain or loss each year. Annual differences between the actual experience and the experience predicted by the assumptions can generate significant volatility in future results related to projections of assets, liabilities, and amounts that are derived from them (funding ratios, required contributions, etc.). This can create risks that affect the future viability of the Fund. In this section, we identify the main drivers to the potential volatility of future results and illustrate the sensitivities of certain results to these drivers.

Identification of Risks

The primary drivers in the potential volatility of future results are:

- Investment returns,
- Contributory hours, and
- Participant longevity and rates of retirement.

Other risk factors not explicitly identified may also turn out to be important in the future.

The current assumption for investment returns is 7.50% per year net of investment expenses. This is a long-term expectation. This means that in any given year, investment returns will be greater than or less than this assumption. However, the geometric mean of the actual investment returns over time should be close to the assumption. Higher returns in a year will accelerate the funding of future benefit payments, while lower returns can create a demand for increased contributions or benefit changes to account for the loss of expected investment income.

The potential volatility of future investment returns is influenced by economic conditions and the Fund's asset allocation. While portfolios with higher expected rates of return lead to lower liabilities and contribution requirements, they also come with higher amounts of volatility.

Contributions are generated from **contributory hours** and are used to pay for the cost of the benefit accruals earned during the year and current administrative expenses, as well as to improve the funding levels of the Fund. While the cost of benefit accruals will naturally fluctuate with the amount of covered hours worked by participants, the rate at which the Fund's funding status will improve can significantly change with the amount of contributory hours in future years. An increase in hours will accelerate the funding since contributions are designed to pay for the cost of accruing benefits and paying off a portion of the unfunded liability, while a decrease in hours may reduce or entirely stop the improvement to funding.

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SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

Participant longevity, or how long participants live, will determine how many monthly pension payments are needed to be paid out by the Fund. If participants live longer on average than expected, more assets will be needed to pay for benefits. If lifetimes are shorter than expected, less will be paid and more money will become available to pay for other participants' benefits. Due to the subsidized early retirement benefits offered under the Fund, the Fund will also be impacted by the retirement patterns of participants, especially if they retire earlier than anticipated.

Plan Maturity

As plans mature, the level of volatility will increase. The cause of this dynamic is that more mature plans typically have higher asset and liability values relative to the amount of contributory hours for the Plan, so unexpected events (investment or demographic) will have larger effects on the sustainability of the Plan. Two key measures of maturity highlight this relationship: the support ratio and negative net cash flow. Higher and increasing values of these metrics indicate more risk and are a characteristic of maturing plans.

Support Ratio: Inactives per Active

One simple measure of plan maturity is the ratio of the number of inactive members (those receiving benefits or entitled to a deferred benefit) to the number of active members. The contributions supporting the plan are usually proportional to the number of active members, so a relatively high number of inactive members compared to the number of active members

indicates a more mature plan that is more sensitive to losses due to risk factors.

The chart on page 4 in Section I shows the support ratio since the Fund's inception in 2013. As a new plan, there were no inactive participants on January 1, 2013. As this chart in Section I shows, the support ratio will steadily increase as the number of inactive participants does as well. As expected, the current ratio of 0.33 is very low when compared to more mature multiemployer plans that have been in existence for decades. The future financial health of the Fund is in part dependent on the number of actives and the level of work available, which determines contributions in the future.

As the support ratio steadily increases in the future, the amount of assets in the Fund per each active or contributory hour increases and the Fund matures. If a future market decline occurs, the problem is usually solved by either contribution increases and/or benefit cuts. Since these two solutions can typically only be done for actives, each active participant's share of the problem will increase as the Fund matures.

More assets do mean a better funded pension plan, but it also means an increasing amount of investment risk. If contributory hours do not grow at the same pace that investment risk does, then each active participant's share of investment risk goes up.

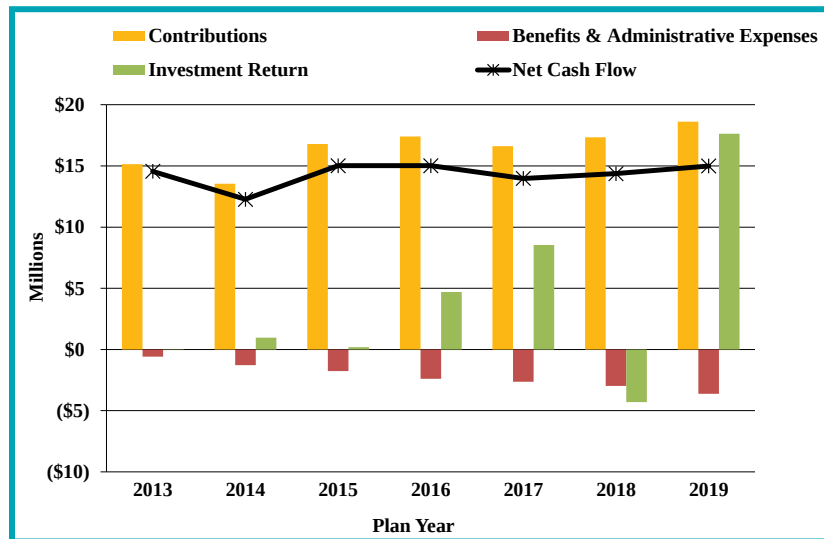
This dynamic is taking place in this Fund, as it does in all pension plans. Consequently, the Board should consider possible ways to manage the amount of investment risk per active participant as opportunities present themselves.

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SECTION II – IDENTIFICATION AND ASSESSMENT OF RISK

Net Cash Flow

The Net Cash Flow (NCF) of the Fund as a percentage of the beginning of year assets is another maturity measure that indicates the sensitivity of the Fund to short-term investment returns. Because this Fund has only been in existence since 2013, the Fund continues to have a positive NCF. Having a positive NCF simply means that the Fund has contributions that exceed benefit payments and administrative expenses. This allows for longer investment horizon because the fund principal is not needed to make benefit payments. The net amount (black line) is expected to decrease in the future while the increase in benefit payments outpaces the increase in contributions. The Fund should continue to monitor this, especially when making decisions regarding how the Fund's assets are invested.



The contributions increased in 2015 as a result of the bargaining parties increasing the contribution rates being made to this Fund.

Assessment of Risks

It is also important to note that demographic experience (longevity, retirement, career length, etc.) can also have a noticeable impact in the measurement of liabilities from year to year. For this Fund, demographic experience has produced less than a 2% change in liabilities for each of the last six years. This means that the volatility from the demographic experience is significantly smaller than from investment returns for this Fund. In comparison, investment returns routinely create positive and negative deviations in the expected asset values of 5% or greater.

A more detailed assessment is always valuable to enhance the understanding of the risks identified above. While more detail would provide some additional value, we do not believe it is necessary to perform an in-depth analysis every year. We recommend the Trustees review the analysis provided above annually and consider a more detailed analysis periodically or when there is a substantial change in the financial position or maturity of the Fund.

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION III – ASSETS

Assets at Market Value

Market values are “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, January 1, 2020		
	Amount	%
Investments		
Mutual Funds	\$ 32,572,188	25.5%
Limited Partnerships	56,057,519	43.8%
Corporate Obligations	12,811,799	10.0%
Common Stocks	13,128,730	10.3%
Common/Collective Trusts	3,114,153	2.4%
Temporary	5,969,420	4.7%
Subtotal	\$ 123,653,809	96.7%
Receivables		
Employer Contributions	\$ 3,950,738	3.1%
Interest and Dividends	194,465	0.2%
Due from Broker	0	0.0%
Prepays and other receivables	43,381	0.0%
Subtotal	\$ 4,188,584	3.3%
Cash	\$ 208,420	0.2%
Total Assets	\$ 128,050,813	100.1%
Liabilities		
Accounts Payable	\$ (101,934)	-0.1%
Due to Broker	(52,474)	0.0%
Subtotal	\$ (154,408)	-0.1%
Market Value of Assets for Statement	\$ 127,896,405	100.0%
Expected Withdrawal Liability Payments	0	
Market Value of Assets for Funding	\$ 127,896,405	

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		
Market Value of Assets -- January 1, 2019	\$	95,274,059
Employer Contributions	\$	18,616,224
Investment Return (Gross)		18,127,591
Benefit Payments		(2,314,973)
Administrative Expenses		(1,306,972)
Investment Expenses		(499,524)
Market Value of Assets -- January 1, 2020	\$	127,896,405

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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 7.5% assumption.

Table III-3 Market Value Investment Gains/(Losses)	
January 1, 2019 Market Value	\$ 95,274,059
2019 Employer Contributions	18,616,224
2019 Benefit Payments	(2,314,973)
2019 Administrative Expenses	(1,306,972)
Expected Investment Earnings (7.5%)	<u>7,697,675</u>
Expected Value December 31, 2019	\$ 117,966,013
Investment Gain / (Loss)	<u>9,930,392</u>
January 1, 2020 Market Value	\$ 127,896,405
Return	17.15%

Assets at Actuarial Value

For long-term planning, actuaries commonly use smoothing techniques to mitigate the short-term volatility exhibited by the capital markets. The Actuarial Value of Assets is calculated by excluding a portion of the prior four years of investment experience using a sliding scale over five years. The expected return on market assets is determined using the Fund's actual cash flows and the assumed actuarial rate of return. The Actuarial Value of Assets is constrained so that it cannot exceed 120% of the market value and cannot be 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 as of January 1, 2020				
Market Value of Assets as of December 31, 2019				\$ 127,896,405
Plan	Initial	Percent	Percent	Amount
<u>Year</u>	<u>Gain/(Loss)</u>	<u>Recognized</u>	<u>Deferred</u>	<u>Deferred</u>
2016	\$ (572,229)	80%	20%	\$ (114,446)
2017	1,689,634	60%	40%	675,854
2018	(12,916,880)	40%	60%	(7,750,128)
2019	9,930,392	20%	80%	<u>7,944,314</u>
Total Gain/(Loss) Excluded				\$ 755,594
Preliminary Actuarial Value as of January 1, 2020				\$ 127,140,811
Corridor for Actuarial Value				
80% of Market Value				\$ 102,317,124
120% of Market Value				\$ 153,475,686
Actuarial Value of Assets as of January 1, 2020				\$ 127,140,811
Actuarial Value as a percent of Market Value of Assets as of January 1, 2020				99.4%

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SECTION III – ASSETS

Asset Gains / (Losses) on Actuarial Value Basis

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

Despite the good investment return on market value, the Actuarial Value of Assets returned 5.82% for the year primarily due to the continued recognition of the prior years' losses. This resulted in a \$1.9 million actuarial investment loss when compared to the 7.5% expected return as shown below.

Table III-5 Actuarial Value Investment Gains/(Losses)		
January 1, 2019 Actuarial Value	\$	105,551,588
2019 Employer Contributions		18,616,224
2019 Benefit Payments		(2,314,973)
2019 Expected Administrative Expenses		(1,296,028)
Expected Investment Earnings (7.5%)		<u>8,468,892</u>
Expected Value December 31, 2019	\$	129,025,703
Investment Gain / (Loss)		<u>(1,884,892)</u>
January 1, 2020 Actuarial Value	\$	127,140,811
Return		5.82%

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION IV – LIABILITIES

In this section, we present detailed information on fund liabilities including:

- Disclosure of Fund 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 people ultimately using the figures and the purpose for which they are using them.

- **Present Value of Future Benefits:** Used for analyzing the financial outlook of the Fund, this is the amount of money needed today to fully pay off all future benefits of current participants of the Fund, assuming current participants continue to accrue benefits until retirement and all actuarial assumptions are met.
- **Actuarial Liabilities:** Used in determining minimum funding standards requirements, maximum tax-deductible contributions, and long-term funding targets. These amounts are determined using the Unit Credit Cost Method.
- **Accrued Liabilities:** Used for communicating the current level of liabilities. This liability represents 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. These amounts are also determined using the Unit Credit Cost Method.

These liabilities are used for determining the funded status under PPA. The law requires these liabilities be compared to the Actuarial Value of Assets to measure funded status. They can be used to establish comparative benchmarks with other plans.

The Accrued Liabilities are also 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 referred to as the Present Value of Accumulated Benefits.

- **Withdrawal Liabilities:** When an employer withdraws from the Fund, the amount of Withdrawal Liability is based on the Fund's Unfunded Vested Benefits. Vested Benefits are non-forfeitable benefits that a participant would be entitled to if they were to terminate coverage as of the end of the prior plan year.
- **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.

None of the liabilities presented in this report is appropriate for settlement purposes.

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SECTION IV – LIABILITIES

The following table 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 net surplus or an unfunded liability.

Table IV-1 Liabilities/Net Surplus (Unfunded)		
	January 1, 2019	January 1, 2020
PRESENT VALUE OF FUTURE BENEFITS		
(1) Active Participant Benefits	\$ 144,461,403	\$ 152,018,093
(2) Retiree and Inactive Benefits	<u>24,211,108</u>	<u>30,666,277</u>
(3) Total Present Value of Future Benefits [(1) + (2)]	\$ 168,672,511	\$ 182,684,370
ACTUARIAL LIABILITY / ACCRUED LIABILITY		
(4) Actuarial Liability / Accrued Liability	\$ 97,582,034	\$ 113,907,699
(5) Actuarial Value of Assets	<u>105,551,588</u>	<u>127,140,811</u>
(6) Net Surplus (Unfunded) [(5) - (4)]	\$ 7,969,554	\$ 13,233,112
(7) Assets as a Percentage of Actuarial Liability [(5) ÷ (4)]	108.2%	111.6%
VESTED LIABILITY FOR WITHDRAWAL LIABILITY PURPOSES		
(8) Present Value of Vested Benefits	\$ 92,729,049	\$ 108,474,896
(9) Market Value of Assets	<u>95,274,059</u>	<u>127,896,405</u>
(10) Net Surplus (Unfunded) [(9) - (8)]	\$ 2,545,010	\$ 19,421,509
CURRENT LIABILITY		
(11) Current Liability	\$ 236,918,119	\$ 252,268,837
(12) Market Value of Assets	<u>95,274,059</u>	<u>127,896,405</u>
(13) Net Surplus (Unfunded)	\$ (141,644,060)	\$ (124,372,432)
(14) Assets as a Percentage of Current Liability [(12) ÷ (11)]	40.2%	50.7%

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SECTION IV – LIABILITIES

Allocation of Liabilities by Type

The Fund's participants may qualify for a benefit on death, termination, and disability as well as on 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	Disability	Total
Unit Credit Normal Cost	\$ 9,380,777	\$ 1,332,276	\$ 185,056	\$ 579,388	\$ 11,477,497
Unit Credit Actuarial Liability					
Actives	\$ 70,597,699	\$ 7,184,817	\$ 1,562,078	\$ 3,896,828	\$ 83,241,422
Terminated Vesteds	0	9,667,722	0	0	9,667,722
Retirees and Beneficiaries	<u>19,747,858</u>	<u>0</u>	<u>335,938</u>	<u>914,759</u>	<u>20,998,555</u>
Total	\$ 90,345,557	\$ 16,852,539	\$ 1,898,016	\$ 4,811,587	\$ 113,907,699
RPA Current Liability Normal Cost	\$ 21,144,556	\$ 5,913,910	\$ 250,724	\$ 1,469,832	\$ 28,779,022
RPA Current Liability					
Actives	\$ 150,160,414	\$ 29,846,425	\$ 2,391,047	\$ 9,445,811	\$ 191,843,697
Terminated Vesteds	0	26,181,455	0	0	26,181,455
Retirees and Beneficiaries	<u>32,016,448</u>	<u>0</u>	<u>553,113</u>	<u>1,674,124</u>	<u>34,243,685</u>
Total	\$ 182,176,862	\$ 56,027,880	\$ 2,944,160	\$ 11,119,935	\$ 252,268,837
Vested RPA Current Liability					
Actives	\$ 101,607,831	\$ 72,166,564	\$ 1,716,530	\$ 8,880,914	\$ 184,371,839
Terminated Vesteds	0	26,181,455	0	0	26,181,455
Retirees and Beneficiaries	<u>32,016,448</u>	<u>0</u>	<u>553,113</u>	<u>1,674,124</u>	<u>34,243,685</u>
Total	\$ 133,624,279	\$ 98,348,019	\$ 2,269,643	\$ 10,555,038	\$ 244,796,979

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SECTION IV – LIABILITIES

Changes in Liabilities

The Fund's liabilities are 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 Actuarial Liabilities
- Benefits paid to retirees
- Participants leaving employment at rates different from expected
- Changes in actuarial assumptions
- Changes in actuarial funding methods

The chart below shows the Actuarial Liability at the current and prior valuations and accounts for the changes in these values over the prior year.

Table IV-3 Changes in Actuarial Liabilities		
Liabilities as of January 1, 2019	\$	97,582,034
Liabilities as of January 1, 2020	\$	113,907,699
Liability Increase (Decrease)	\$	16,325,665
Change due to:		
Benefit Accruals	\$	11,727,966
Benefit Payments		(2,314,973)
Increase for Interest		8,113,008
Experience (Gains)/Losses		(1,200,336)
Changes in Assumptions		0
Plan Amendments		0
Total	\$	16,325,665

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION V – CONTRIBUTIONS

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

- Actuarial contributions; and
- Government Limits which could affect the above.

Actuarial Contributions

For this Fund, the actuarial contribution is developed using the Unit Credit Cost Method. The actuarial contribution which can also be considered as the actuarial cost is determined in two parts.

The first part is the Unit Credit Normal Cost. This is the value of the benefits expected to be accrued over the coming year.

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 required by the IRS to determine the Minimum Required Contribution. Because of this, the actuarial contribution and the Minimum Required Contribution are the same.

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.

To ensure that minimum contributions are met, pension plans are required to retain an Enrolled Actuary to complete Schedule MB to Form 5500 on an annual basis. When the bargained contributions exceed the Minimum Required Contribution, the Fund will build up a Credit Balance. The Credit Balance can be used to make up the difference between the Minimum Required Contribution and the bargained contribution.

The actuarial contribution for 2020 is shown below compared to the Government Limits and the projected contributions.

**Table V-1
Contributions for 2020**

Actuarial Contribution	
Unit Credit Normal Cost plus Admin Expenses	\$ 12,764,997
Amortization Payment	1,581,800
Interest to End of Year	<u>1,076,010</u>
Total Contribution	\$ 15,422,807
Government Limits	
Maximum Deductible Contribution	\$ 268,333,882
Minimum Contribution (before Credit Balance)	15,422,807
Interest Adjusted Credit Balance	29,454,296
Minimum Contribution (after Credit Balance)	0
Estimated Employer Contributions	\$ 20,000,000

The tables on the following pages show the development of the minimum and maximum contributions for 2020.

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SECTION V – CONTRIBUTIONS

For the prior year (2019) Funding Standard Account (FSA), the Fund continued to use a special provision of ERISA available to multi-employer plans called Shortfall Funding. Shortfall Funding is intended to help Funds adjust their minimum funding requirements to lessen the effects of fluctuations in contribution base units and the timing of bargaining contracts. The Fund adopted Shortfall Funding starting with the 2014 Plan Year.

Plan Year that Shortfall Funding was used. A decision whether to continue to use the Shortfall Funding for 2020 can be made when the Schedule MB is filed in October 2021.

Under Shortfall Funding, a Shortfall base for each plan year after adoption is determined as the difference between the regular FSA charges and the charges using Shortfall Funding. To do this a Shortfall Factor is applied to the “Without Shortfall” FSA charges to determine “With Shortfall” FSA charges for that plan year.

The Shortfall base for the year is the difference between the “With Shortfall” charges and the regular “Without Shortfall” charge. This base is amortized as an additional charge or credit starting in the current year FSA beginning with the 2017 FSA. This date was determined based on the expiration of the last collective bargaining contract in effect when Shortfall Funding was adopted. Shortfall bases that occurred before December 31, 2016 were increased with interest to that date.

The Shortfall Factor for a given year is the ratio of the actual to the expected contribution base units. The 2019 Shortfall Factor used in the table on the following page is 0.9438.

The Fund must use the Shortfall Method for at least five years unless it seeks special approval from the Internal Revenue Service to terminate earlier. The 2019 Plan Year was the sixth

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION V – CONTRIBUTIONS

Table V-2 Funding Standard Account for Plan Years Ending December 31,					
	2019 Without Shortfall	2019 With Shortfall	2019 Shortfall (Gain)/Loss	2020 Without Shortfall	
1. Charges For Plan Year					
a. Normal Cost plus Administrative Expenses	\$ 12,977,966	\$ 12,319,355	\$ (658,611)	\$ 12,764,997	
b. Amortization Charges	1,454,669	1,372,978	(81,691)	1,599,331	
c. Interest on a. and b. to Year End	<u>1,082,448</u>	<u>1,026,925</u>	<u>(55,523)</u>	<u>1,077,325</u>	
d. Total Charges	\$ 15,515,083	\$ 14,719,258	\$ (795,825)	\$ 15,441,653	
2. Credits For Plan Year					
a. Prior Year Credit Balance	\$ 21,208,468	\$ 21,208,468		\$ 27,399,345	
b. Employer Contributions <i>(estimate for 2020)</i>	18,616,224	18,616,224		20,000,000	
c. Amortization Credits	17,531	16,547	\$ (984)	17,531	
d. Interest on a., b., and c. to Year End	<u>2,277,438</u>	<u>2,277,364</u>	<u>(74)</u>	<u>2,792,707</u>	
e. Total Credits	\$ 42,119,661	\$ 42,118,603	\$ (1,058)	\$ 50,209,583	
3. Credit Balance at End of Year [2. - 1.] <i>(estimate for 2020)</i>	\$ 26,604,578	\$ 27,399,345	\$ 794,767	\$ 34,767,930	

MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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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 plus Administrative Expenses	\$	12,764,997
b. Net Charge to Amortize Unfunded Actuarial Liability over 10 years		(1,793,375)
c. Interest on a. and b. to Year End		<u>822,872</u>
d. Total	\$	11,794,494
e. Minimum Required Contribution at Year End		15,422,807
f. Greater of d. and e.		15,422,807
g. Full Funding Limit		125,586,735
h. Maximum Deductible Contribution, lesser of f. and g.		15,422,807
2. 140% of Current Liability Calculation		
a. Current Liability at Start of Year	\$	252,268,837
b. Present Value of Benefits Estimated to Accrue during Year		28,779,022
c. Expected Current Liability Benefit Payments		(3,788,995)
d. Net Interest on a., b. and c. at Current Liability Interest Rate (2.95%)		<u>8,235,430</u>
e. Expected Current Liability at End of Year	\$	285,494,294
f. 140% of e.	\$	399,692,012
g. Actuarial Value of Assets	\$	127,140,811
h. Expected Funding Benefit Payments		(3,794,459)
i. Expected Expenses		(1,287,500)
j. Net Interest on g., h. and i. at Valuation Interest Rate (7.50%)		<u>9,299,278</u>
k. Estimated Value of Assets	\$	131,358,130
l. Unfunded Current Liability at Year End, [f. – k.], not less than \$0	\$	268,333,882
3. Maximum Deductible Contribution at Year End, greater of 1h. and 2l.	\$	268,333,882

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
ACTUARIAL VALUATION AS OF JANUARY 1, 2020**

SECTION V – CONTRIBUTIONS

Table V-4 Development of Actuarial Gain/(Loss) for the Plan Year Ended December 31, 2019		
1. Unfunded/(Surplus) Actuarial Liability at Start of Year	\$	(7,969,554)
2. Normal Cost and Administrative Expenses at Start of Year		12,977,966
3. Interest on 1. and 2. to End of Year		375,632
4. Employer Contributions for Prior Year		(18,616,224)
5. Interest on 4. to End of Year		(685,488)
6. Change in Unfunded Actuarial Liability Due to Changes in Assumptions		0
7. Change in Unfunded Actuarial Liability Due to Changes in Plan Design		0
8. Change in Unfunded Actuarial Liability Due to Changes in Funding Method		<u>0</u>
9. Expected Unfunded/(Surplus) Actuarial Liability at End of Year	\$	(13,917,668)
10. Actual Unfunded/(Surplus) Actuarial Liability at End of Year	\$	(13,233,112)
11. Actuarial Gain / (Loss) [9. – 10.]		
a. Investment Gain / (Loss)	\$	(1,884,892)
b. Liability Experience Gain / (Loss)		<u>1,200,336</u>
c. Total Actuarial Gain / (Loss) [11a. + 11b.]	\$	(684,556)
12. Amortization Factor for Actuarial Gain / (Loss)		9.4892
13. Amortization Credit / (Charge) for Actuarial Gain / (Loss) [11c ÷ 12]	\$	(72,141)

MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION V – CONTRIBUTIONS

Table V-5 Schedule of Amortizations Required for Minimum Required Contribution as of January 1, 2020						
Type of Base	Date Established	Initial Amount	Initial Amortization Years	1/1/2020 Outstanding Balance	Remaining Amortization Years	Beginning of Year Amortization Amount
CHARGES						
1. Actuarial Loss	1/1/2014	\$ 16,706	15	\$ 12,171	9	\$ 1,775
2. Actuarial Loss	1/1/2015	503,197	15	393,793	10	53,368
3. Shortfall Funding Method*	1/1/2015	552,882	20	588,119	15	61,978
4. Actuarial Loss	1/1/2016	1,954,428	15	1,627,351	11	206,935
5. Shortfall Funding Method*	1/1/2016	384,758	20	382,450	16	38,918
6. Actuarial Loss	1/1/2017	723,137	15	635,646	12	76,442
7. Shortfall Funding Method*	1/1/2017	22,669	20	21,031	17	2,074
8. Actuarial Loss	1/1/2018	1,301,118	15	1,199,566	13	137,324
9. Shortfall Funding Method*	1/1/2019	35,805	20	34,978	19	3,267
10. Assumption Change	1/1/2019	5,810,323	15	5,587,863	14	612,312
11. Actuarial Loss	1/1/2019	2,469,802	15	2,375,240	14	260,276
12. Shortfall Funding Method*	1/1/2020	794,767	20	794,767	20	72,521
13. Actuarial Loss	1/1/2020	684,556	15	684,556	15	72,141
TOTAL CHARGES				\$ 14,337,531		\$ 1,599,331
CREDITS						
1. Assumption Change	1/1/2014	\$ 30,579	15	\$ 22,276	9	\$ 3,249
2. Shortfall Funding Method*	1/1/2018	156,323	20	149,022	18	14,282
TOTAL CREDITS				\$ 171,298		\$ 17,531
TOTALS				\$ 14,166,233		\$ 1,581,800

* Based on Fund electing to start amortization in 2017, the year after expiration of the collective bargaining agreement. The Initial Amount was determined based on Pre-Shortfall FSA Charges and increased with interest until amortization commenced in 2017.

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION V – CONTRIBUTIONS

Table V-6 Accumulated Reconciliation Account and Balance Test as of January 1, 2020		
1. Reconciliation Account at Start of Year	\$	0
2. Net Outstanding Amortization Bases	\$	14,166,233
3. Credit Balance at Start of Year	\$	27,399,345
4. Unfunded Actuarial Liability at Start of Year from Funding Equation [2. - 1. - 3.]	\$	(13,233,112)
5. Actuarial Liability at Start of Year	\$	113,907,699
6. Actuarial Value of Assets at Start of Year	\$	127,140,811
7. Unfunded Actuarial Liability at Start of Year from Liability Calculation [5. - 6.]	\$	(13,233,112)
<i>The Fund passes the Balance Test because line 4. equals line 7.</i>		

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION V – CONTRIBUTIONS

Table V-7 Development of Full Funding Limitation for the Plan Year beginning January 1, 2020		
	Minimum	Maximum
1. ERISA Actuarial Liability Calculation		
a. Actuarial Liability	\$ 113,907,699	\$ 113,907,699
b. Normal Cost plus Administrative Expenses	12,764,997	12,764,997
c. Lesser of Market Value and Actuarial Value of Assets	(127,140,811)	(127,140,811)
d. Credit Balance at Start of Year	27,399,345	N/A
e. Net Interest on a., b., c., and d. at Funding Interest Rate (7.50%)	<u>2,019,842</u>	<u>(35,109)</u>
f. Actuarial Liability Full Funding Limit, limited to zero	\$ 28,951,072	\$ (503,224)
2. Full Funding Limit Override (RPA 1994)		
a. RPA 1994 Current Liability at Start of Year	\$ 252,268,837	\$ 252,268,837
b. Present Value of Benefits Estimated to Accrue during Year	28,779,022	28,779,022
c. Expected Current Liability Benefit Payments	(3,788,995)	(3,788,995)
d. Net Interest on a., b. and c. at Current Liability Interest Rate (2.95%)	<u>8,235,430</u>	<u>8,235,430</u>
e. Expected Current Liability at End of Year	\$ 285,494,294	\$ 285,494,294
f. 90% of e.	\$ 256,944,865	\$ 256,944,865
g. Actuarial Value of Assets	\$ 127,140,811	\$ 127,140,811
h. Expected Funding Benefit Payments	(3,794,459)	(3,794,459)
i. Expected Expenses	(1,287,500)	(1,287,500)
j. Net Interest on g., h. and i. at Valuation Interest Rate (7.50%)	<u>9,299,278</u>	<u>9,299,278</u>
k. Estimated Value of Assets	\$ 131,358,130	\$ 131,358,130
l. RPA 1994 Full Funding Limit Override [f. – k.], limited to zero	\$ 125,586,735	\$ 125,586,735
3. Full Funding Limitation at End of Year, greater of 1f. and 2l.	\$ 125,586,735	\$ 125,586,735

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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SECTION VI – FASB ASC TOPIC NO. 960 DISCLOSURE

Table VI-1 Present Value of Accumulated Benefits as of January 1, 2020 in Accordance with FASB ASC Topic No. 960		
	Amounts	Counts
1. Actuarial Present Value of Benefits		
For Retirees and Beneficiaries	\$ 20,998,555	1,719
Terminated Vesteds	9,667,722	3,627
Active Participants	79,423,812	10,158
Total Vested Benefits	\$ 110,090,089	15,504
2. Non-vested Benefits	\$ 3,817,610	5,866
3. Present Value of Expected Administrative Expenses	\$ 14,631,251	
4. Accumulated Benefits	\$ 128,538,950	21,370
5. Market Value of Assets	\$ 127,896,405	
6. Funded Ratios		
Vested Benefits	116%	
Accumulated Benefits	100%	
Reconciliation of Present Value of Accumulated Benefits		
1. Actuarial Present Value at Start of Prior Plan Year (w/o Admin Expenses)	\$ 97,582,034	
2. Increase (Decrease) over Prior Year due to:		
Benefit Accruals	\$ 11,727,966	
Benefit Payments	(2,314,973)	
Increase for Interest	8,113,008	
Experience (Gains)/Losses	(1,200,336)	
Changes in Assumptions	0	
Plan Amendments	0	
Total	\$ 16,325,665	
3. Actuarial Present Value at End of Prior Year (w/o Admin Expenses)	\$ 113,907,699	
4. Present Value of Expected Administrative Expenses	14,631,251	
5. Actuarial Present Value at End of Prior Year (w/ Admin Expenses)	\$ 128,538,950	

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APPENDIX A – MEMBERSHIP INFORMATION

The data for this valuation was provided electronically by Associated Administrators LLC (AA). Cheiron did not audit any of the data. The data is as of January 1, 2020. Below is a list of assumptions Cheiron made in processing the data this year. These assumptions only affected a de minimis number of participants.

Participant Status for Valuation Purposes

Only those participants who had an active status (A or AV) and last month worked after August were considered active employees for valuation purposes. The remaining participants were valued as terminated vested if they had at least five years of vesting service; otherwise non-vested terminations.

Accrued Benefits for Terminated Vested Employees

The accrued benefit for each terminated vested was estimated based on the amount of benefit service reported and the monthly accrual levels for Tier I or Tier II participation.

Full-Time/Part-Time Status

Full-time versus part-time status is not included in the data provided to Cheiron. For Tier I participants, this status is determined based on the most recent contribution rate for that participant. Tier II participants are assigned full-time versus part-time status based on the majority of their hours for the 2019 Plan Year. If they do not have hours in the 2019 Plan Year, earlier years are used.



**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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APPENDIX A – MEMBERSHIP INFORMATION

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

- Age/Service Distribution for Tier I Full-Time Active Participants
- Age/Service Distribution for Tier I Part-Time Active Participants
- Age/Service Distribution for Tier II Full-Time Active Participants
- Age/Service Distribution for Tier II Part-Time Active Participants
- Counts and Average Benefit Amount by Age for Retirees, Beneficiaries, and Disabled Participants
- Counts and Average Benefit Amount by Age for Deferred Vested Participants and Surviving Spouses entitled to future benefits
- Participant Reconciliation

Table A-1 Full-Time Tier I Participants as of January 1, 2020											
AGE	COMPLETED YEARS OF CREDITED SERVICE*										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	1	0	8	13	0	22
55-59	0	0	0	3	1	3	3	31	177	34	252
60-64	0	0	0	0	2	1	2	5	59	150	219
65-69	0	0	0	0	0	1	0	2	7	61	71
70 & Up	0	0	0	0	0	0	0	0	6	21	27
Total	0	0	0	3	3	6	5	46	262	266	591
Average Age = 61.1 Average Service* = 39.5											

* Includes credited service earned under FELRA & UFCW Pension Fund earned prior to January 1, 2013.

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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APPENDIX A – MEMBERSHIP INFORMATION

Table A-2 Part-Time Tier I Participants as of January 1, 2020											
AGE	COMPLETED YEARS OF CREDITED SERVICE										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	
Under 25	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	0	0	0
50-54	0	0	0	0	0	0	0	2	2	0	4
55-59	0	0	0	1	0	0	0	3	12	9	25
60-64	0	0	0	0	0	0	1	4	23	23	51
65-69	0	0	0	0	0	0	0	0	5	13	18
70 & Up	0	0	0	0	0	0	0	0	0	4	4
Total	0	0	0	1	0	0	1	9	42	49	102
Average Age = 62.0 Average Service* = 39.3											

* Includes credited service earned under FELRA & UFCW Pension Fund earned prior to January 1, 2013.

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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APPENDIX A – MEMBERSHIP INFORMATION

Table A-3 Full-Time Tier II Participants as of January 1, 2020											
AGE	COMPLETED YEARS OF CREDITED SERVICE*										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	
Under 25	3	79	18	0	0	0	0	0	0	0	100
25-29	2	102	159	37	0	0	0	0	0	0	300
30-34	2	73	88	164	25	0	0	0	0	0	352
35-39	3	68	61	126	185	21	0	0	0	0	464
40-44	2	59	77	84	137	167	22	0	0	0	548
45-49	1	45	59	97	133	160	170	96	0	0	761
50-54	0	50	44	77	149	109	125	348	40	0	942
55-59	2	30	61	89	144	143	102	294	87	1	953
60-64	0	13	36	57	106	102	84	195	48	0	641
65-69	0	7	13	18	38	29	34	69	11	0	219
70 & Up	0	0	7	6	17	13	13	30	3	0	89
Total	15	526	623	755	934	744	550	1,032	189	1	5,369
Average Age = 49.3 Average Service* = 19.0											

* Includes credited service earned under FELRA & UFCW Pension Fund earned prior to January 1, 2013.

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APPENDIX A – MEMBERSHIP INFORMATION

Table A-4 Part-Time Tier II Participants as of January 1, 2020											
AGE	COMPLETED YEARS OF CREDITED SERVICE										Total
	Under 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40 & Up	
Under 25	649	1,195	46	0	0	0	0	0	0	0	1,890
25-29	136	569	281	37	0	0	0	0	0	0	1,023
30-34	77	328	188	188	16	0	0	0	0	0	797
35-39	73	260	136	122	102	8	0	0	0	0	701
40-44	70	232	117	96	100	49	7	0	0	0	671
45-49	69	219	125	113	121	75	51	17	0	0	790
50-54	91	324	137	131	122	57	51	70	9	0	992
55-59	98	292	168	176	156	79	53	78	9	0	1,109
60-64	75	263	190	143	150	81	63	54	9	0	1,028
65-69	37	141	101	86	88	42	44	25	4	0	568
70 & Up	31	94	85	66	58	21	13	22	3	0	393
Total	1,406	3,917	1,574	1,158	913	412	282	266	34	0	9,962
Average Age = 43.6 Average Service* = 7.5											

* Includes credited service earned under FELRA & UFCW Pension Fund earned prior to January 1, 2013.

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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APPENDIX A – MEMBERSHIP INFORMATION

**Table A-5
Inactive Participants as of January 1, 2020**

Pensioners and Beneficiaries Receiving Benefits

Age	Disability Retirements		Normal, Early Deferred Vested Retirements		Surviving Spouses and Beneficiaries Receiving Benefits		Total	
	Number	Monthly Benefit	Number	Monthly Benefit	Number	Monthly Benefit	Number	Monthly Benefit
Under 55	18	\$ 13,590	13	\$ 1,614	16	\$ 16,951	47	\$ 32,155
55-59	26	28,596	185	25,510	9	9,064	220	63,170
60-64	36	42,275	302	38,685	6	4,492	344	85,452
65-69	6	4,593	596	65,673	8	10,694	610	80,960
70-74	0	0	332	28,579	4	3,593	336	32,172
75-79	0	0	112	9,365	3	2,979	115	12,344
80 & Over	0	0	46	3,539	1	501	47	4,040
Total	86	\$ 89,054	1,586	\$ 172,965	47	\$ 48,274	1,719	\$ 310,293

Deferred Vested Participants and Surviving Spouses Entitled to Future Benefits

Age	Number	Monthly Benefit
Under 45	1,751	\$ 104,102
45-49	391	25,740
50-54	433	28,213
55-59	446	30,133
60-64	364	24,496
65 & Over	242	17,945
Total	3,627	\$ 230,629

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APPENDIX A – MEMBERSHIP INFORMATION

Table A-6 Data Reconciliation from the Prior to Current Valuation						
	Active Participants	Deferred Vested	Disability Retirements	Retirees	Beneficiaries	Total
January 1, 2019	16,500	3,201	70	1,324	33	21,128
New Members	2,206	0	0	0	24	2,230
Died / Terminated without a Vested Benefit / Cash Out	(1,900)	(50)	(6)	(25)	(10)	(1,991)
Vested Termination	(683)	683	0	0	0	0
Rehired Inactives	93	(93)	0	0	0	0
Disabilities	(12)	(15)	27	0	0	0
Retirements	(180)	(102)	(5)	287	0	0
Miscellaneous Adjustments	0	3	0	0	0	3
January 1, 2020	16,024	3,627	86	1,586	47	21,370

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APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

This summary reflects all amendments made to the Fund up to and including January 2020. The rates for the majority of participants are set forth in this Appendix.

1. Eligibility

Each employee of either Giant or Safeway with bargaining units represented by Locals 400, 27, or 1776 (formerly 1357), where the Collective Bargaining Agreements call for contributions to this Fund on behalf of such employee, will become a participant upon receipt of the first such contribution on his behalf.

2. Normal Retirement Date

An employee's Normal Retirement Date is the last day of the month in which his 65th birthday occurs.

3. Past Service

Service credited under the FELRA & UFCW Pension Fund as of January 1, 2013 is counted for purposes of determining benefit eligibility.

4. Future Service

On and after January 1, 2013, an employee for whom monthly contributions are made receives future service credit for each month for which a contribution is made on his behalf. An employee for whom hourly contributions are made receives future service credit for each plan year at the rate of one-quarter of a year for each 400 such hours for which contributions are made up to a full year credit for 1,600 or more such hours. In either case, an employee also receives future service benefit credit for any period during which he is reported as being in the military service of the United States and returns to covered employment within the period for protection of his statutory rights to re-employment.

5. Accrued Monthly Pension

An employee's Accrued Monthly Pension is determined according to the contribution rate applicable to him from time to time. The contribution rate for most of the participants in the Fund is set in the Collective Bargaining Agreement between FELRA and the participating unions.

**MID-ATLANTIC UFCW & PARTICIPATING EMPLOYERS PENSION FUND
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APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

The applicable contribution rates and benefit rates for Tier I and Tier II employees are shown below.

	Tier I		Tier II			
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
Contribution Rate at January 1, 2020 ¹	\$645.17/month	\$238.88/month	\$0.57/hour	\$0.38/hour	\$0.57/hour	\$0.38/hour
Benefit Rate Per Year of Credited Service (After December 31, 2012)	\$47	\$32	\$25	\$15	\$15	\$10

¹ Rates shown in the 1st Quarter 2020 AMR.

For Tier I participants, the benefit rate for credited service in excess of 30 years is \$54 per month per year of full-time credited service and \$37 per month per year of part-time credited service. Credited service earned in the FELRA & UFCW Pension Fund as of December 31, 2012 is included when determining whether the participant has more than 30 years of credited service.

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APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

6. Normal Retirement Benefit

An employee's Normal Retirement Benefit is his Accrued Monthly Pension determined as of his Normal Retirement Age (65).

7. Employment after Age 65

An employee whose employment continues beyond his Normal Retirement Age will continue to receive additional pension credit for that employment.

8. Early Retirement Benefit

An employee who has both attained age 55 and completed at least 15 years of Credited Service can retire prior to his Normal Retirement Date. Tier II participants are also eligible to retire provided the Participant has both attained age 62 and completed at least 10 years of Credited Service. His early retirement pension is equal to his Accrued Monthly Pension, reduced by one-half of one percent for each month in the period between the date his pension commences and his 60th birthday (65th in the case of employees having an hourly contribution basis).

9. Special Early Retirement

An employee (other than an employee having an hourly contribution basis) who has either (a) attained age 60 and completed at least five years of Credited Service, or (b) has completed at least 30 years of Credited Service regardless of age, may retire and receive his Accrued Monthly Pension without actuarial reduction.

10. Disability Retirement

An employee who becomes totally and permanently disabled (according to Social Security criteria) after he has completed at least ten years of Credited Service, is entitled to a Disability Retirement Pension. His Accrued Pension will be payable without actuarial reduction as soon as his disability has been established to the satisfaction of the Trustees and he has completed the six-month waiting period.

11. Vesting

If an employee who has completed five or more years of "Vesting Service" terminates covered employment other than by death or disability prior to the time he is eligible for an Early (or Normal) Retirement Benefit, he will be entitled to a Deferred Vested Pension beginning on his 60th birthday (65th in the case of employees having an hourly contribution basis), equal to his Accrued Monthly Pension up to the date his covered employment terminates. A former employee may elect to receive his pension payments on the first day of any month on or after his 55th birthday, in which case his pension amount will be reduced by one-half of one percent for each month in the period between the date his pension begins and his 60th birthday (65th in the case of employees having an hourly contribution basis). For this purpose, Vesting Service is equal to (a) the number of years of Vesting Service granted under the FELRA & UFCW Pension Fund as of January 1, 2013, and (b) the number of years of Vesting Service earned after January 1, 2013, whereby one full year of Vesting Service is granted for each calendar year in which either five or more

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APPENDIX B – SUMMARY OF MAJOR PLAN PROVISIONS

7 months of Credited Service were granted or 750 Regular Time Hours were credited; if an employee has less than 750 Regular Time Hours or five months of Credited Service in any plan year and transfers to (or is transferred from) non-covered service with a participating employer, such non-covered service will also be included as Vesting Service.

12. Pre-Retirement Spouse's Pension

Each employee who is vested under the Fund (other than as set out below) is provided with pre-retirement spouse's pension coverage, whereby if his death occurs before actual retirement, his spouse will receive a lifetime pension from the Fund. The spouse's pension will be payable starting with the later of (a) the earliest date the employee could have elected to retire under the Fund, or (b) the employee's death. The amount of such pension will be one-half of that which would have been payable to the employee if he had retired early on the date of the start of the spouse's pension and elected a Joint and 50 Percent Survivor option.

13. Normal Form of Pension

The normal form of pension for an unmarried employee (or for a married employee who so elects) will be a lifetime pension. If his pension accrual was greater than \$15 per month per year of service (or \$10 for part-time employees), the pension is also payable for 60-months certain. 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 Percent Survivor basis.

Upon the death of a pensioner, other than pensioners receiving Deferred Vested Pensions, a lump sum death benefit will be paid to the employee's designated beneficiary. The amount is \$500, \$1,000, or \$2,500, depending on the contribution rate applicable to the participant and the full-time/part-time employment status. This benefit will be split between the FELRA & UFCW Pension Fund and this Fund.

14. Reciprocity

An employee covered by this Fund may transfer to (or from) the UFCW and Participating Employers' Pension Plan without loss of pension credits. Upon eventual retirement, each Fund will pay the benefit for service accrued under that Fund, according to the benefit rate in effect under that Fund, at the time of retirement. Reciprocity also has been authorized between this Fund and certain other collectively bargained plans in the retail food industry, under which payment of benefits from each Fund is made according to the benefit rate in effect at the end of his covered employment under each Fund.

Note: The above summary is for the sole purpose of stating the principal plan provisions on which the valuation is based. Entitlement to benefits under the Fund is determined under the terms and provisions of the Pension Plan document.

15. Changes in Plan Provisions

None

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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

A. Actuarial Assumptions

1. Rates of Investment Return

Funding and disclosure purposes:
7.50% compounded annually

Current Liability under RPA 1994:
2.95% compounded annually

All investment returns are net of investment expenses.

The Fund's investment consultant, Investment Performance Services LLC, anticipates an annual return of 7.15% (net of fees) based on the current asset allocation, with an underlying inflation assumption of 2.00%. Furthermore, this underlying expectation does not incorporate the expectation that the active managers will outperform index funds. Based on the investment consultant's expectations and the Fund's assumption for inflation being higher at 3% result in the 7.5% assumption being reasonable at this time.

2. Rates of Mortality

Funding and disclosure purposes:

Active:
RP-2000 Combined Healthy mortality table for males and females.

Healthy Inactive:

RP-2000 Healthy Annuitant mortality table set forward one year for males and no adjustment for females. The mortality table for active lives is used prior to age 49 for males and age 50 for females, but set forward one year for males.

Disabled:

RP-2000 Disabled Annuitant for ages prior to 65. The same mortality as Healthy Inactives for ages 65 and older.

Past experience has shown more deaths have occurred than assumed, which has yielded liability gains attributable to this experience. Therefore, the current assumption includes a margin for future mortality improvements. This will continue to be monitored on an annual basis and adjustments will be made when necessary.

Current Liability:

The separate 2020 Static Mortality Tables for annuitants and non-annuitants as prescribed under IRS Notice 2019-26 and Regulation §1.431(c)(6)-1.

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3. Rates of Turnover

Terminations of employment for reasons other than death or retirement are assumed to be in accordance with annual rates as shown below.

Service	Number Expected to Terminate Annually Per 1,000
0	400
1	220
2	180
3	150
4	130
5	120
6	110
7	105
8	90
9	90
10	90
11	80
12	80
13	80
14	70
15	70
16	70
17	50
18	50
19	50
20	40
21	30
22 and over	25

4. Rates of Retirement

Tier I rates of retirement depend on whether a participant has fewer than 30 years of service or more than 30 years of service.

Age	Number Expected to Retire Annually Per 1,000		
	Tier 1 Under 30 years	Tier 1 Over 30 years	Tier 2
50	0	200	0
51	0	200	0
52	0	200	0
53	0	200	0
54	0	200	0
55	85	200	75
56	85	200	75
57	85	200	75
58	85	200	75
59	85	200	75
60	150	200	100
61	150	250	100
62	300	350	150
63	200	400	125
64	200	400	150
65	300	400	200
66	300	400	200
67	200	400	200
68	200	400	200
69	200	400	200
70 and over	1,000	1,000	1,000

Employees who leave employment with entitlement to a deferred vested pension are assumed to commence

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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

receipt of their pension when first eligible for unreduced benefits.

5. Rates of Disability

Terminations of employment for disability are assumed to be equal to 50% of the Group Long-Term Disability Insurance Crude Rates of Disablement for males published in the Transactions of the Society of Actuaries, 1979.

Illustrative rates are shown below.

Number Expected to Become Disabled Annually Per 1,000	
Age	Rate
25	0.3
30	0.3
35	0.4
40	0.7
45	1.4
50	2.7

6. Marital Status and Elections

80% of participants are assumed to be married at death, and eligible for pre-retirement spouse benefits.

56% of participants are assumed to elect the joint and survivor option on retirement. The rest are assumed to elect the single life form.

Husbands are assumed to be three years older than their wives.

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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

7. Service Accrual

All employees are assumed to earn one year of service credit for each year of future employment.

8. Administrative Expenses

Assumed annual administrative expenses including PBGC premiums are \$1,287,500 (\$60.25 per participant) payable at the beginning of the year, increasing by 3.0% for each future year.

For determining the Present Value of Accumulated Benefits FASB ASC 960, the expense assumption is assumed to be \$60.25 per participant for the current plan year (payable at the beginning of the year) and increasing at the rate of 3.0% per year thereafter.

9. Rationale for Demographic Assumptions

Assumptions are based on the latest experience study review performed in 2007 for FELRA & UFCW Pension Fund. Since this Fund's population and plan provisions mirror those of that plan, assumptions used in performing the valuation for that fund are appropriate here. The results of that study are incorporated here by reference. The assumptions continue to be closely monitored, and Cheiron has proposed an experience study for the near future.

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APPENDIX C – ACTUARIAL ASSUMPTIONS AND METHODS

10. Changes since the Previous Valuation

As required, the current liability interest rate and mortality tables were updated. The interest rate went from 3.06% to 2.95% and the mortality table was updated to the 2020 Static Mortality Tables for annuitants and non-annuitants (per IRS Notice 2019-26).

B. Actuarial Methods

1. Asset Valuation Method

The valuation assets are determined as the market value less (1) 80% of the investment gain/(loss) during the preceding year, less (2) 60% of the investment gain/(loss) during the second preceding year, less (3) 40% of the investment gain/(loss) during the third preceding year, less (4) 20% of the investment gain/(loss) during the fourth preceding year. For the purpose of this calculation, the gain/(loss) is defined as the difference between the actual and the expected return (based on the valuation interest rate) on the market value of assets during the year.

The actuarial value is taken to be the adjusted market value as described above, but subject to a 20 percent corridor limit around the actual market value; that is, the actuarial value is never greater than 120 percent of the market value, nor less than 80 percent of market value.

2. Funding Method: Unit Credit Cost Method

The cost method for valuation of liabilities used for this valuation is the unit credit method. This is one of a family of valuation methods known as accrued benefits methods. The chief characteristic of an accrued benefits method is that the funding pattern follows the pattern of benefit accrual. Under the unit credit actuarial cost method, the normal cost is determined as that portion of each Participant's benefit attributable to service expected to be earned in the upcoming plan year. The actuarial liability, which is determined for each Participant as of each valuation date, is the actuarial present value of the Participant's current accrued benefit as of the valuation date.

One of the significant effects of this funding method is that, depending on the demographics of the population, the unit credit method tends to produce lower costs in the early years. There is a possibility that as the population ages, the annual cost could increase over time.

3. Changes in Actuarial Methods since Last Valuation

None