OUTSTATE MICHIGAN TROWEL TRADES PENSION PLAN

Actuarial Valuation Report
For Plan Year Commencing
January 1, 2019

United Actuarial
Services, Inc.
Actuaries and Consultants

June 5, 2019

Board of Trustees
Outstate Michigan Trowel Trades Pension Plan

Dear Trustees:

We have been retained by the Board of Trustees of the Outstate Michigan Trowel Trades Pension Plan to perform annual actuarial valuations of the pension plan. This report presents the results of our actuarial valuation for the plan year beginning January 1, 2019. The valuation results contained herein are based on current plan provisions summarized in Appendix A, the actuarial assumptions and methods listed in Appendix B and on financial statements audited by Benda, Grace, Stulz & Company, P.C. Participant data was provided by TIC International. While we have reviewed the data for reasonableness in accordance with Actuarial Standards of Practice No. 23, we have not audited it. The data was relied on as being both accurate and comprehensive.

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

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

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

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions, changes in economic or demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an

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amortization period or additional cost or contribution requirements based on the plan's funded status), and changes in plan provisions or applicable law.

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

The undersigned actuary meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report.

We are available to respond to any questions you may have about this report.

UNITED ACTUARIAL SERVICES, INC.

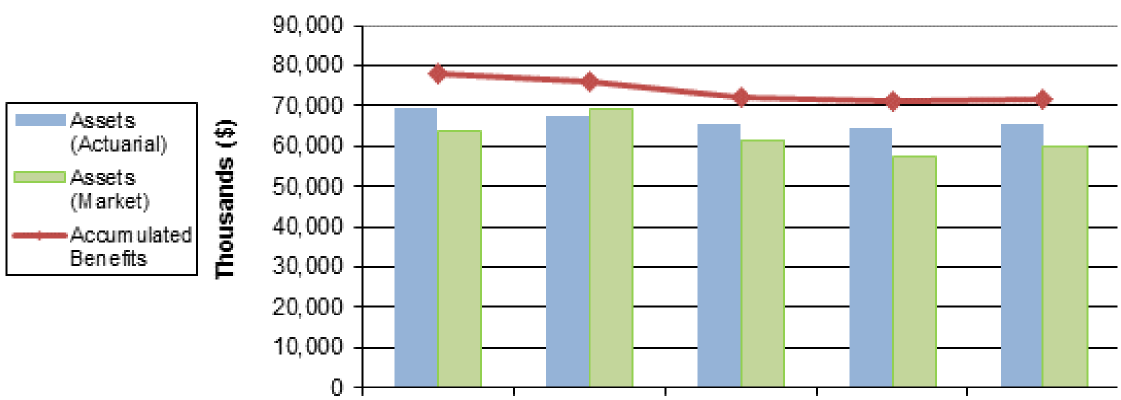
Enrolled Actuary

Paul Wedding ASA, EA, MAA
Consulting Actuary

PART I: SUMMARY OF RESULTS

5 - YEAR SUMMARY OF VALUATION RESULTS

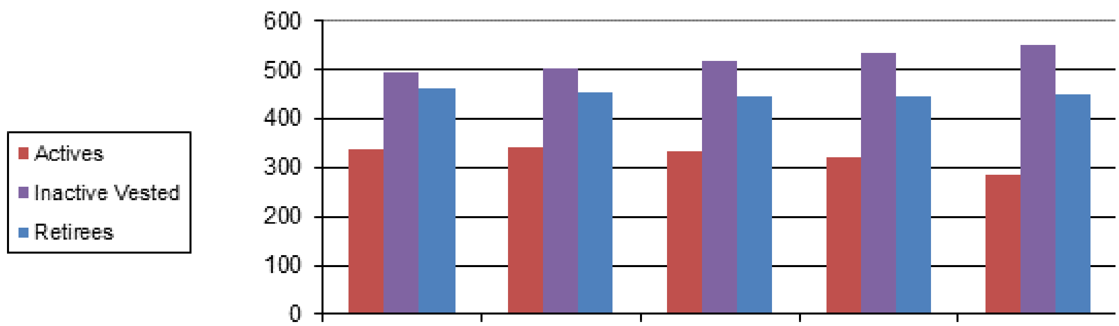
Actuarial Study as of January 1,	*2019*	*2018*	*2017*	*2016*	*2015*
PPA funded status	Safe	Safe	Safe	Critical	Safe
Improvements restricted*	Yes	Yes	Yes	Yes	Yes
Funded ratio					
PPA certification	88.1%	90.1%	90.7%	87.4%	91.2%
Valuation report (AVA)	88.8%	88.9%	90.7%	90.7%	91.1%
Valuation report (MVA)	81.5%	90.9%	84.8%	80.5%	83.1%
Proj. year of insolvency	None	None	None	2064	None
Credit Balance ($ 000)	15,598	14,526	13,161	11,689	10,543
Date of first projected funding deficiency (with extension)					
PPA certification	12/31/28	None	None	12/31/25	12/31/26
Valuation report	12/31/28	None	None	None	12/31/27
Net investment return					
On market value	-6.05%	14.86%	8.98%	-1.16%	6.23%
On actuarial value	4.78%	4.86%	3.17%	1.40%	3.74%
Asset values ($ 000)					
Market	63,661	68,969	61,272	57,422	59,709
Actuarial	69,397	67,378	65,534	64,749	65,445
Accum. ben. ($ 000)	78,153	75,833	72,258	71,364	71,840



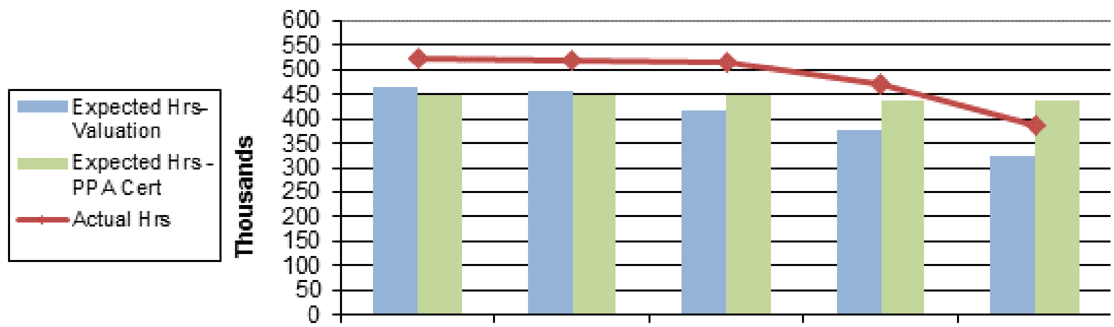
* Benefit improvement restrictions due to fund having amortization extension. Restrictions in place until 1/1/2038 when bases with amortization extension have been fully amortized

5 - YEAR SUMMARY OF DEMOGRAPHICS

Actuarial Study as of January 1,	*2019*	*2018*	*2017*	*2016*	*2015*
Participant counts					
Active	337	343	333	323	286
Inactive vested	495	502	520	533	550
Receiving benefits	461	456	447	445	451
Total	1,293	1,301	1,300	1,301	1,287
Average entry age	32.5	33.1	32.8	32.7	31.4
Average attained age	45.0	45.2	45.4	45.0	44.6



Hours worked in prior plan year (thousands)					
Expected hours valuation	467	458	417	376	325
Expected hours PPA cert	450	450	450	438	438
Actual hours worked	524	518	517	471	385



CHANGES FROM PRIOR STUDY

Changes in Plan Provisions

The plan provisions underlying this valuation differ from those underlying the prior valuation in the following respects:

- A pre-retirement single sum death benefit of 50% of contributions payable immediately to the beneficiary following the death of an inactive vested participant was added to the plan effective October 1, 2018.

Changes in Actuarial Assumptions and Methods

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

- The mortality projection scale was updated from MP-2017 to MP-2018 and the mortality rate multiplier remained at 105%. This change was made in order to reflect the latest mortality improvement data available and to better match the standard tables to specific plan experience.

- The assumed future hours worked were increased from 1,450 hours to 1,500 hours per future year for vested active lives and from 1,150 hours to 1,200 hours per future year for non-vested active lives. This represents our best estimate of future hours based on recent plan experience.

- The expense load on ASC 960 liabilities was changed from 5.50% to 5.25% based on the current ratio of three years actual expenses to three years of actual benefit payments being paid.

- The current liability interest rate was changed from 2.98% to 3.06%. The new rate is within established statutory guidelines.

HISTORY OF MAJOR ASSUMPTIONS

Assumption	Actuarial Study as of January 1,				
	2019	2018	2017	2016	2015
Future rate of net investment return	7.75%	7.75%	7.75%	7.75%	7.75%
Mortality table	RP-2006	RP-2006	RP-2006	RP-2006	RP-2006
Adjustment	105%	105%	115%	3 yr. sf.	3 yr. sf.
Projection scale	MP-2018	MP-2017	MP-2016	MP-2014	MP-2014
Future expenses	$240,000	$240,000	$260,000	$260,000	$260,000
Average future hourly contribution rate*					
Credited	$4.19	$4.20	$3.95	$3.75	$3.80
Non-credited	2.22	2.22	2.22	2.07	1.82
Total	$6.41	$6.42	$6.17	$5.82	$5.62
Average future annual hours					
Vested	1,500	1,450	1,450	1,350	1,350
Non-vested	1,200	1,150	1,150	1,150	1,150

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

EXPERIENCE VS. ASSUMPTIONS

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

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

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

Plan Year Ending December 31, 2018	*Expected*	*Actual*
Decrements		
Terminations		48
less*: Rehires*		16
Terminations (net of rehires)	28.9	32
Active retirements	10.5	7
Active disabilities	1.7	2
Pre-retirement deaths	4.3	6
Post-retirement deaths	18.2	21
Monthly benefits of deceased retirees	$ 10,516	$ 9,623
Financial assumptions		
Rate of net investment return on actuarial value	7.75%	4.78%
Administrative expenses	$ 240,000	$ 229,322
Other demographic assumptions		
Average retirement age from active (new retirees)	60.6	60.3
*Average retirement age from inactive (new retirees)**	61.2	62.2
Average entry age (new entrants)	33.1	34.1
Hours worked per vested active	1,450	1,612
Hours worked per non-vested active	1,150	1,262
Total hours worked (valuation assumption)	466,550	524,011
Total hours worked (PPA certification assumption)	450,000	524,011
Unfunded liability (gain)/loss		
(Gain)/loss due to asset experience		$ 1,986,848
(Gain)/loss due to liability experience		(179,566)
Total (gain)/loss		$ 1,807,282

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

PLAN MATURITY

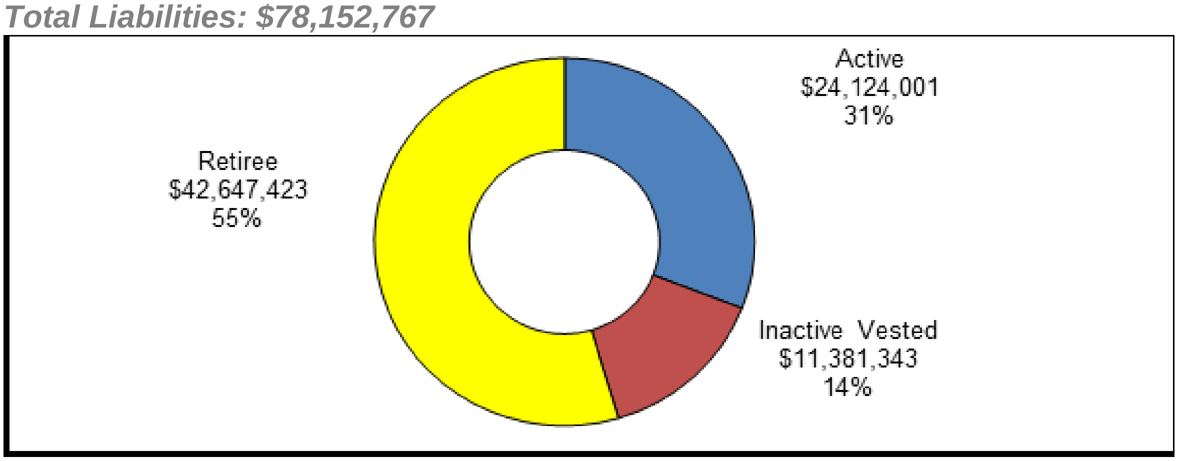
Measures of plan maturity can play a part in understanding risk and a plan's ability to recover from adverse experience

When a new pension plan is first established, its liabilities are typically limited to active plan participants. However, as people become vested and retire, a plan begins to develop liabilities attributable to nonactive participants (retirees and inactive vested participants). The process of adding nonactive liabilities (often referred to as "maturing") is a natural outgrowth of the operation of the plan. As a plan matures, its liabilities tend to balloon in relation to its contribution base, making it more difficult to correct for adverse outcomes by increasing contribution rates or reducing future benefit accruals.

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

Actuarial Study as of January 1,	*2019*	*2018*	*2017*	*2016*	*2015*
Retiree/active headcount ratio	1.37	1.33	1.34	1.38	1.58
Nonactive/active headcount ratio	2.84	2.79	2.90	3.03	3.50
Cash flow					
Contr.-ben.-exp. ($000)	(1,179)	(1,314)	(1,249)	(1,601)	(2,206)
Percent of assets	-1.85%	-1.91%	-2.04%	-2.79%	-3.69%

Liabilities of Actives, Retirees, and Inactive Vesteds
Total Liabilities: $78,152,767



UNFUNDED VESTED BENEFITS/EMPLOYER WITHDRAWAL LIABILITY

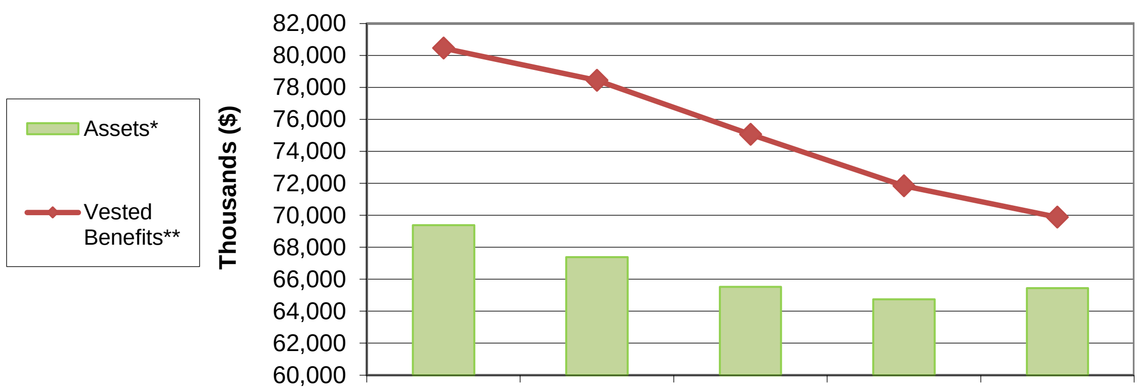
An employer withdrawing during the coming year may have withdrawal liability

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

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

Presumptive Method ($ 000)

December 31,	2018	2017	2016	2015	2014
Vested benefits interest	7.75%	7.75%	7.75%	7.75%	7.75%
Vested benefits	76,459	74,263	70,726	71,847	69,884
less: Asset value*	69,397	67,378	65,534	64,749	65,445
UVB	7,062	6,885	5,192	7,098	4,439
Unamortized VAB	3,996	4,171	4,334		
UVB + VAB	11,058	11,056	9,526	7,098	4,439



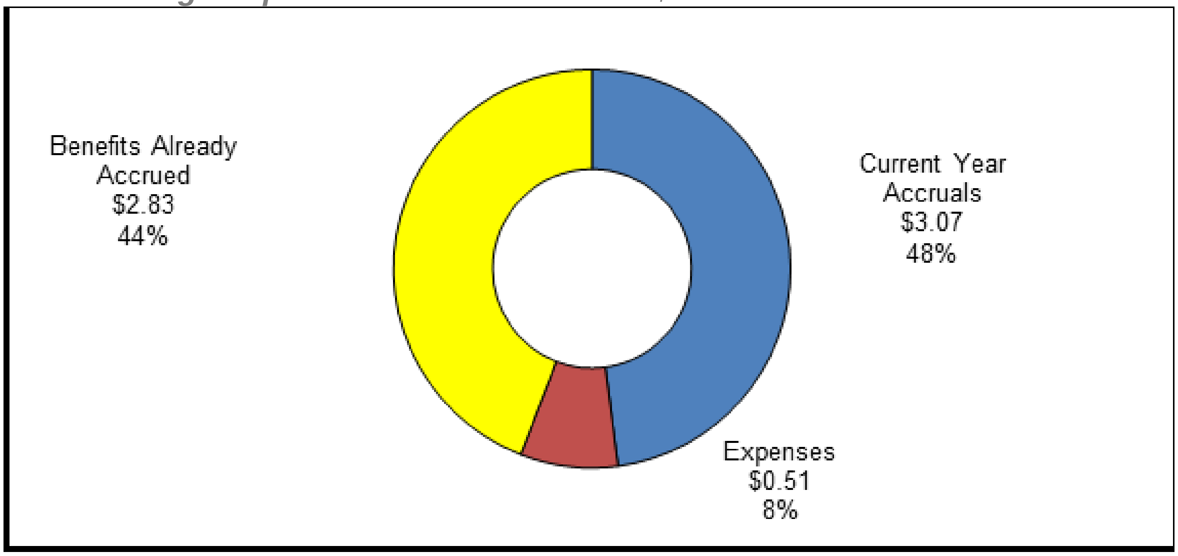
* Actuarial value
** Includes VAB

CONTRIBUTION ALLOCATION

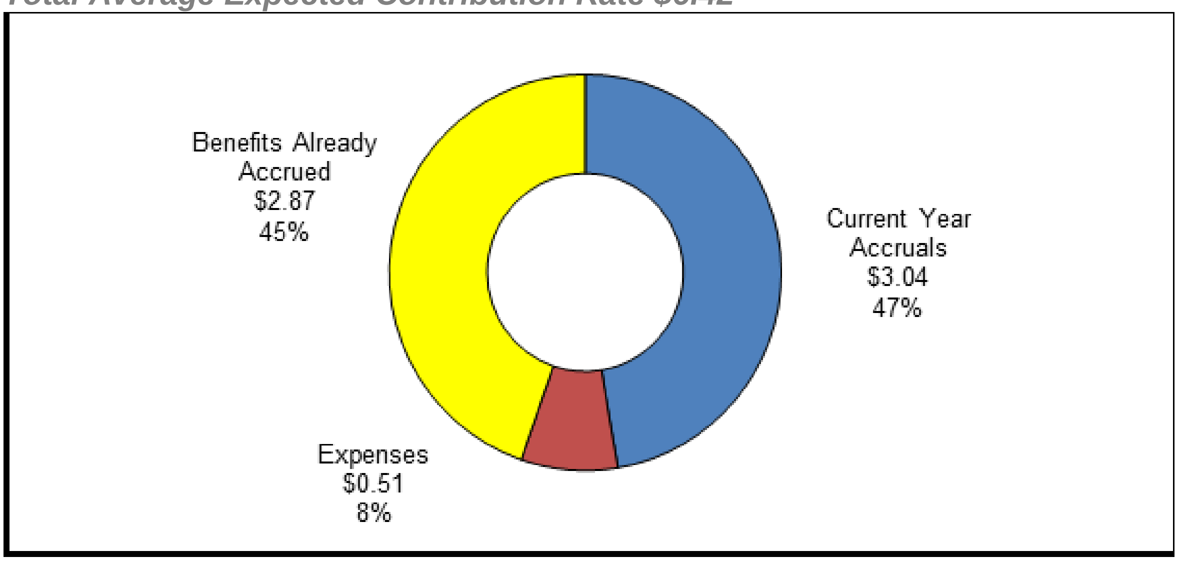
These graphs show how the contributions are being spent

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

Contribution Allocation as of January 1, 2019
Total Average Expected Contribution Rate $6.41



Contribution Allocation as of January 1, 2018
Total Average Expected Contribution Rate $6.42



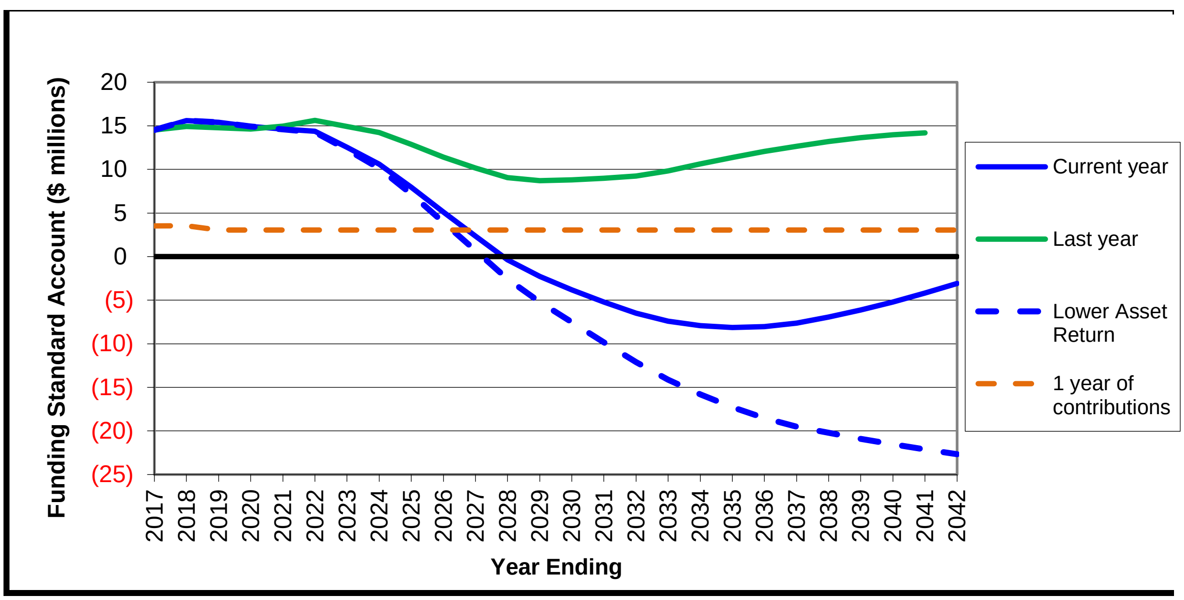
FUNDING STANDARD ACCOUNT PROJECTION

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

The funding standard account (FSA) was established by ERISA as a means of determining compliance with minimum funding standards. The FSA is hypothetical in the sense that it does not represent actual assets held by a custodian. Rather, a positive FSA balance (called a "credit balance") means that the plan has exceeded minimum funding standards on a cumulative basis, while a negative balance (called a "funding deficiency") means that the plan has fallen short of such standards.

Actuaries must project the plan's FSA each year in order to determine PPA status. If a funding deficiency is projected in a future year, the plan could be forced into yellow (endangered) or red (critical) status depending how far into the future the first projected funding deficiency is. The plan's FSA projection appears below. These projections are based on the assumptions summarized in the "Actuarial Assumptions used for Projections" section of Appendix B. An additional blue dashed line has been added to illustrate the impact of a lower potential asset return of 6.50% for the next 10 years. This reflects the median short term expected asset return in recent studies by UAS.

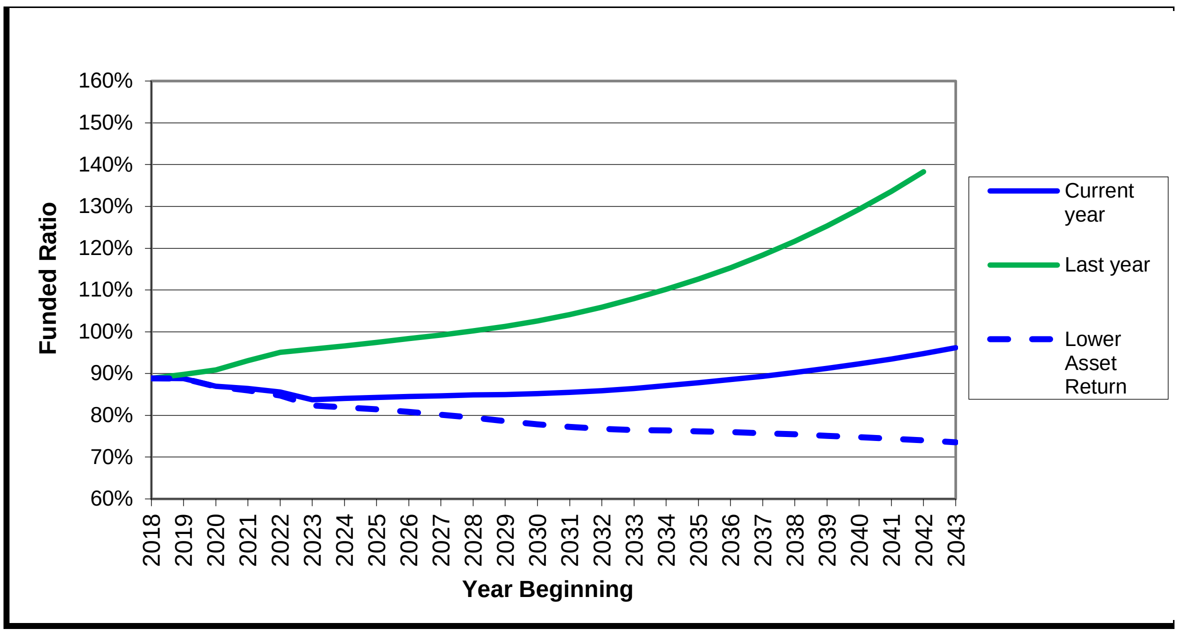
As a rule of thumb, UAS recommends that non-Critical status plans maintain a projected credit balance of at least one year's contributions (shown as an orange dotted line in the graph below) in each future year. Maintaining a "cushion" in the Funding Standard Account helps minimize the risk of a surprise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



FUNDED RATIO PROJECTION

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

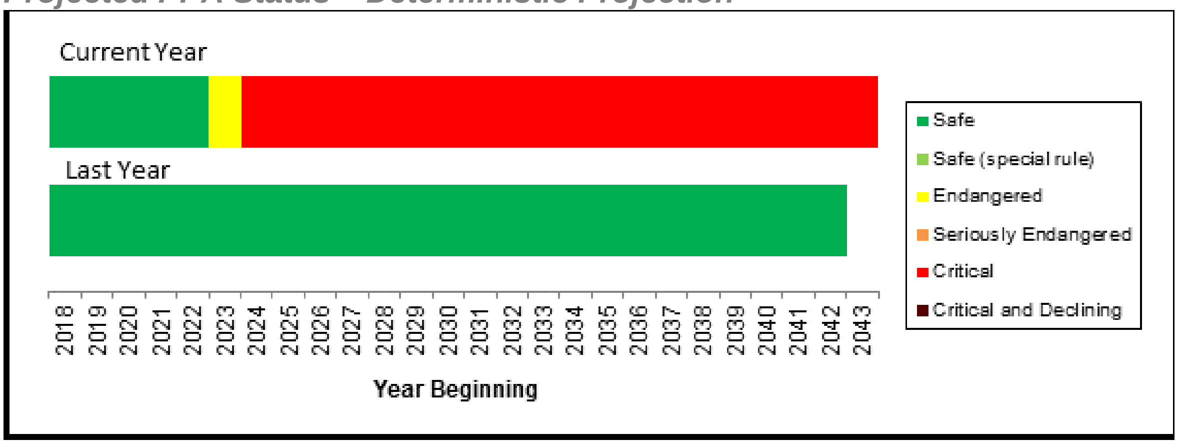
The funded ratio is defined as the actuarial value of plan assets divided by the plan's liabilities for accrued benefits. Along with the funding standard account projection, funded ratio is one of the two major drivers of PPA funded status. In order for a plan to enter the green zone (also called "safe" or "not endangered or critical") the funded ratio must be at least 80%. An insolvency, which is the plan year when the plan would run out of money, occurs if the funded ratio is projected to be 0%. In order for a plan to enter critical and declining status, an insolvency needs to be projected within 20 plan years of the PPA certification (it may need to be within 15 years under certain conditions). The projection of the funded ratio appears below. These projections are based on the assumptions summarized in the "Actuarial Assumptions used for Projections" section of Appendix B. An additional blue dashed line has been added to illustrate the impact of a lower potential asset return of 6.50% for the next 10 years. This reflects the median short term expected asset return in recent studies by UAS.



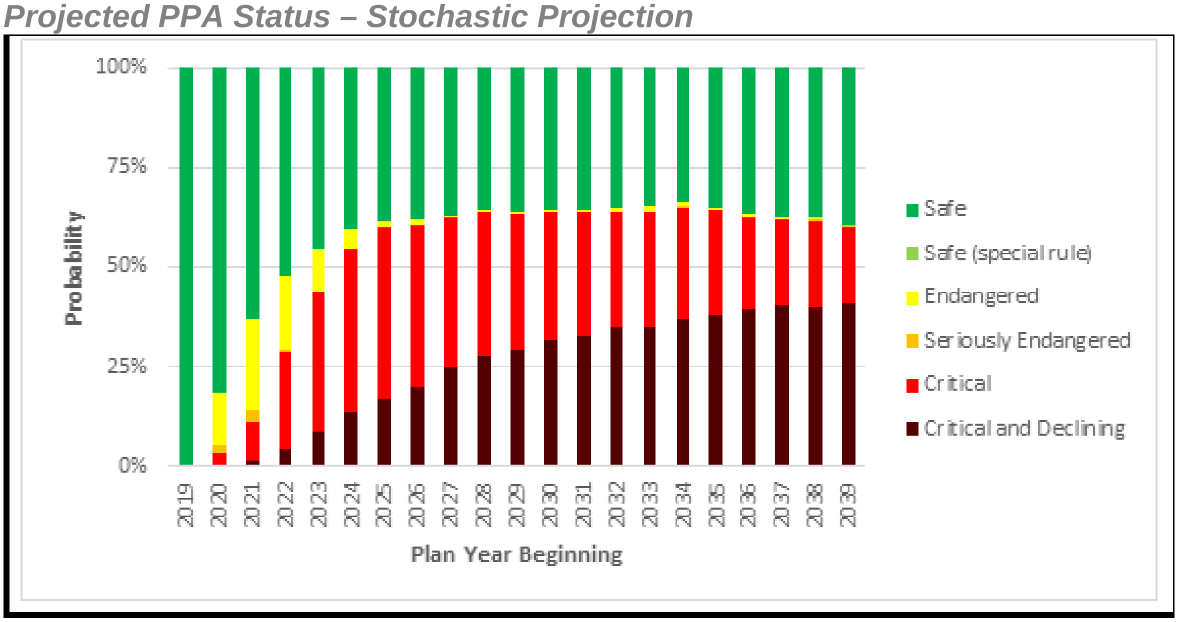
PPA STATUS PROJECTIONS

The Pension Protection Act of 2006 (PPA), as amended by the Multiemployer Pension Reform Act of 2014 ("MPRA"), requires all multiemployer pension plans to obtain an annual status certification. The possible statuses are: "Safe", "Endangered", "Seriously Endangered", "Critical" or "Critical and Declining". The criteria for these determinations are outlined in Appendix D. The following graph shows PPA status *deterministic* projections based on the assumptions summarized in the "Actuarial Assumptions used for Projections" section of Appendix B. The second following graph shows the probability of the Plan being in each status for the next 20 years using a *stochastic* projection based on the mean and standard deviation of the Plan's investment portfolio. The zone projections are based on the current plan and do not include any further action if the plan moves to a worse PPA zone.

Projected PPA Status – Deterministic Projection



Projected PPA Status – Stochastic Projection

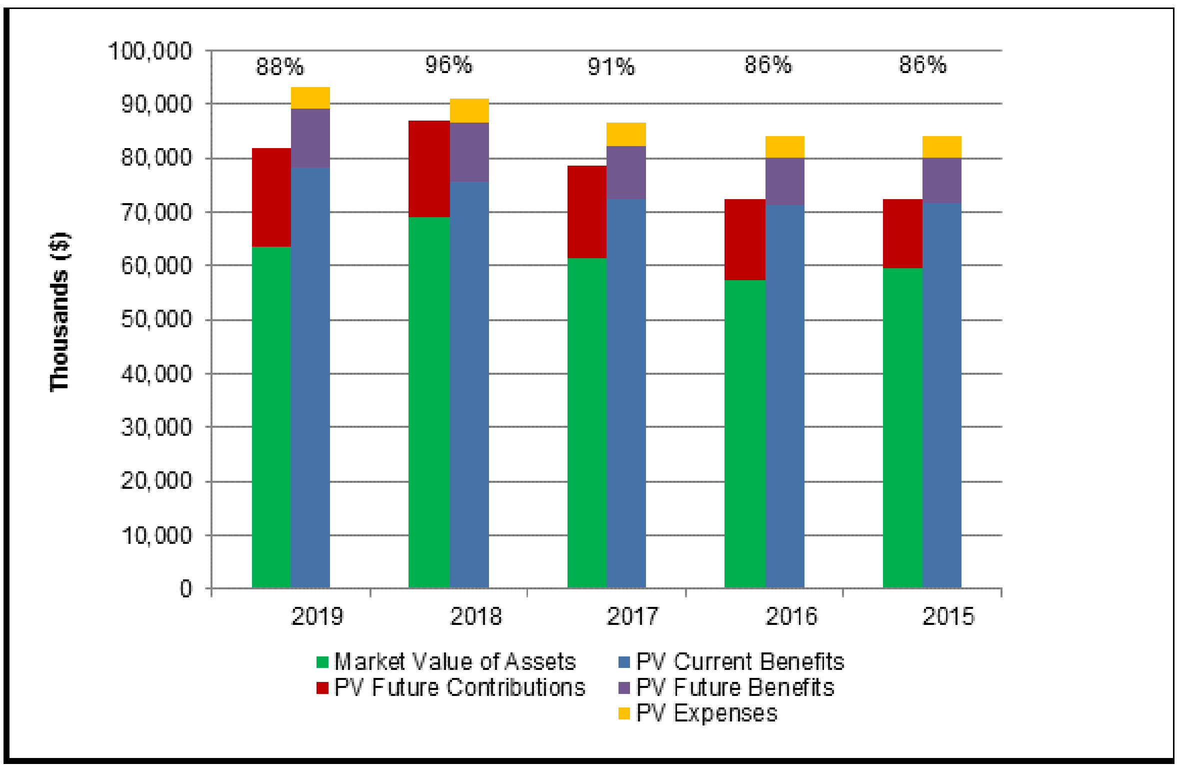


ULTIMATE FUNDED STATUS

Ultimate funded status is an indicator of the ability of current participants to pay for their own benefits

An actuarial valuation deals primarily with the ability of the plan to meet Internal Revenue Code requirements now and in the near future. As such, it is heavily focused on current plan assets and liabilities. But it is also important to keep in mind the true purpose of the plan funding—that is, to accumulate sufficient assets to pay the benefits that the plan has promised to its participants. The chart below looks at this long-term funding adequacy. To the current plan assets, we add the present value of all future contributions expected to be made for the current plan participants. To the value of the plan's liabilities for benefits that have been previously earned, we add the present value of future benefits the current plan participants are expected to earn and the present value of future administrative expenses the plan is expected to pay. Ideally these ultimate asset and liability values will be approximately equal.

An ultimate funded status of less than 100% could be an indication of generational shifting (i.e. the need for one generation of participants to fund the benefits of the preceding generation) and/or a reliance on the continued addition of new participants in order to fund benefits.



STRESS TESTING AND SENSITIVITY ANALYSIS

The table below illustrates the impact on the plan when experience varies from key assumptions

Currently, in order to project no funding deficiencies, the plan requires a minimum noncredited contribution rate increase of 30¢ per year for the next 2 years plus a 14¢ increase the year following. Considering that experience rarely matches our assumptions exactly, we developed the table below to demonstrate the impact that variations in certain key assumptions would have on the contribution rate increase schedule. We examined future hours assumptions equal to the baseline, 5% lower, and 5% higher. We examined asset returns for the 2019 plan year of 10.00%, 7.25%, 4.00%, and 0.00%. We also examined the impact of a lower asset return of 6.50% for the next 10 years at the baseline hours. Stochastic modeling is also available for a more detailed analysis of sensitivity to asset returns.

Key Funding Statistics (without rate increases) and Non-Credited Rate Increases Needed to Project No Funding Deficiencies

Hours Assumption	Funding Stats	Return for 2019 PY (7.25% for 2020-28 PY and 7.75% Thereafter)			
		10.00%	Assumed Return*	4.00%	0.00%
5% Lower 451,250 in 2019 and thereafter	100% Funded: No UVB: Proj. Deficiency: Increase:	2043 2041 2030 30¢ 2020 25¢ 2021 ($0.55 total)	2052 2049 2029 30¢ 2020-2022 17¢ 2023 ($1.07 total)	Never Never 2028 30¢ 2020-2025 13¢ 2026 ($1.93 total)	Never Never 2028 41¢ 2020-2025 35¢ 2026 ($2.81 total)
Baseline 475,000 in 2019 and thereafter	100% Funded: No UVB: Proj. Deficiency: Increase:	2040 2039 2031 30¢ 2020 ($0.30 total)	**2046** **2044** **2029** **30¢ 2020-2021** **14¢ 2022** **($0.74)**	2060 2057 2029 30¢ 2020-2023 18¢ 2024 ($1.38 total)	Never Never 2028 35¢ 2020-2025 26¢ 2026 ($2.36 total)
5% Higher 498,750 in 2019 and thereafter	100% Funded: No UVB: Proj. Deficiency: Increase:	2038 2036 2032 9¢ 2020 ($0.09 total)	2042 2041 2030 30¢ 2020 17¢ 2021 ($0.47 total)	2050 2048 2029 30¢ 2020-2022 10¢ 2023 ($1.00 total)	Never Never 2028 30¢ 2020-2025 13¢ 2026 ($1.93 total)
Lower short-term 6.50% return for 10 yrs Baseline hours	100% Funded: No UVB: Proj. Deficiency: Increase:	2056 2053 2029 30¢ 2020-2022 3¢ 2023 ($0.93 total)	Never Never 2029 30¢ 2020-2024 19¢ 2025 ($1.69 total)	Never Never 2028 33¢ 2020-2025 32¢ 2026 ($2.30 total)	Never Never 2028 44¢ 2020-2025 40¢ 2026 ($3.04 total)

* The assumed return for the 2019 plan year is 7.25% in the first three rows and 6.50% in the last row.

STRESS AND SENSITIVITY ANALYSIS (CONT.)

If the contributions above were credited instead of non-credited, the amounts required to avoid projected funding deficiencies would need to be about 220% higher than the non-credited amounts shown above. For example, at the baseline hours of 475,000 hours and a return of 7.25% for 2019, the credited increases needed to avoid projected funding deficiencies would need to be 96¢ in 2020 - 2021 and 43¢ in 2022 ($2.35 total) instead of 30¢ in 2020 – 2021 and 14¢ in 2022.

More action can be taken in any funding result to provide an even bigger “cushion” against future losses. There are other possible solutions besides the provided contribution rate increase schedule shown above, including different lengths of contribution rate increases. Benefit reductions could also be added to lower or eliminate the necessary contribution rate increases.

All actions taken to eliminate projected funding deficiencies need to be in place until the credit balance projection is past its low point. This is about 17 years out. Asset gains or strong hours could speed up this timeframe.

PART II: SUPPLEMENTAL STATISTICS

PARTICIPANT DATA RECONCILIATION

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

Participants Valued As	Active	Inactive Vested	Receiving Benefits	Total Valued
January 1, 2018	343	502	456	1,301
Change due to:				
New hire	37	-	-	37
Rehire	16	(10)	-	6
Termination	(48)	21	-	(27)
Disablement	(2)	-	2	-
Retirement	(7)	(9)	16	-
Death	(2)	(4)	(21)	(27)
Cash out	-	-	-	-
New beneficiary	-	3	8	11
Certain pd. expired	-	-	-	-
*Data adjustment**	-	(8)	-	(8)
Net change	(6)	(7)	5	(8)
January 1, 2019	337	495	461	1,293

* Comprised of 6 participants and 1 deferred beneficiary that were previously thought to be vested but are ineligible for benefits, 2 participants who are now over age 71 and assumed to be deceased, and 1 vested participant previously thought to be non-vested.

HOURS WORKED DURING PLAN YEAR

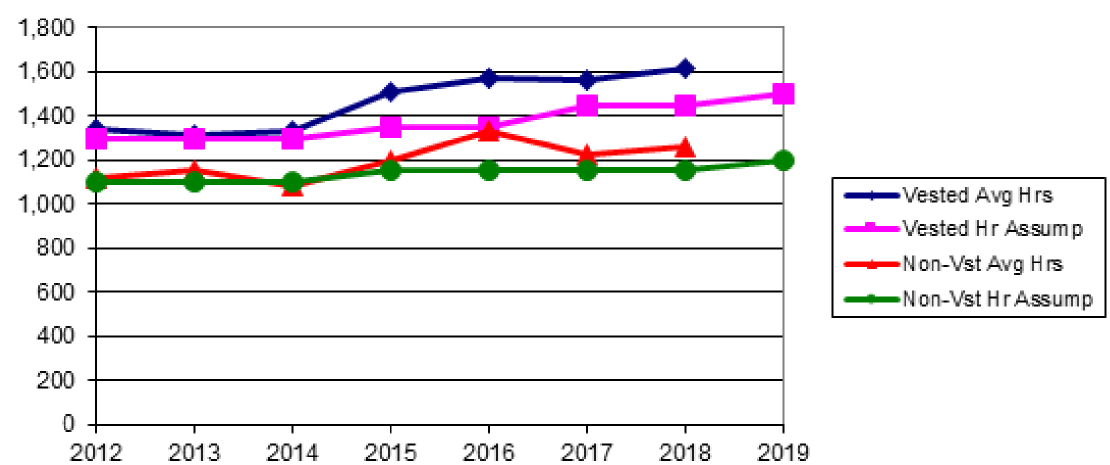
Hours Worked Per Participant

Plan Year Ending December 31, 2018	Number	Hours Worked	Average Hours Worked
Actives			
Vested	244	393,314	1,612
Non-vested, continuing	68	92,169	1,355
Non-vested, new entrant	25	25,151	1,006
Total active	337	510,634	1,515
Others	102	13,377	131
Total for plan year	439	524,011	1,194

History of Total Actual and Expected Hours Worked (Thousands)

Plan Year Ending December 31,	2019	2018	2017	2016	2015
Expected hours valuation	473	467	458	417	376
Expected hours PPA cert	475	450	450	450	438
Actual hours worked	n/a	524	518	517	471

History of Average Actual and Expected Hours Worked per Participant



CONTRIBUTIONS MADE DURING PLAN YEAR

Employer Credited Contributions Reported in Employee Data

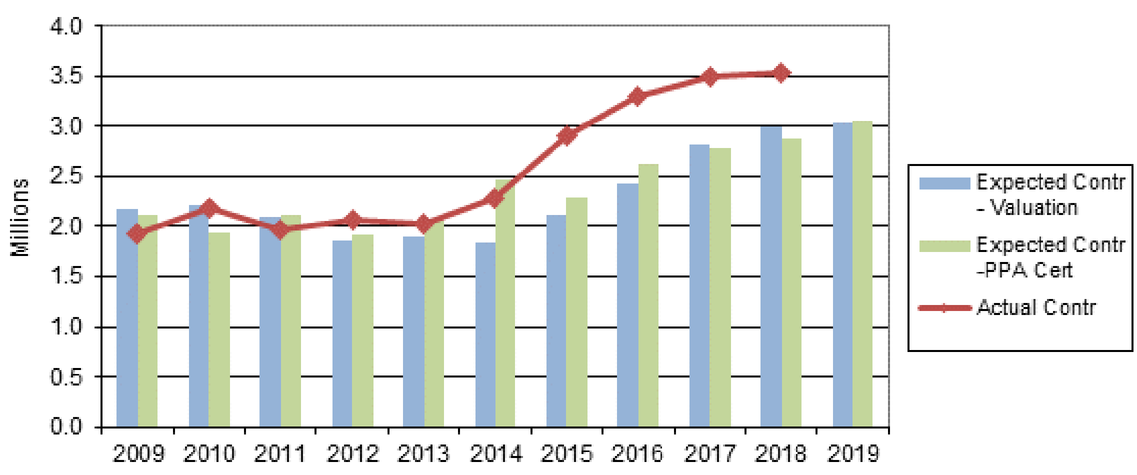
Plan Year Ending December 31, 2018	*Number*		*Credited Contributions Reported*
Actives			
Vested	244	$	1,676,955
Non-vested, continuing	68		376,918
Non-vested, new entrant	25		103,560
Total valued as active	337		2,157,433
Others	102		72,086
Total for plan year	439	$	2,229,519
Average credited hourly contribution rate		$	4.25

Comparison with Audited Employer Contributions

Employer credited contributions reported in data	$	2,229,519
Adjusted total employer contributions reported*	$	3,392,823
Total audited employer contributions	$	3,535,500
Percent reported		96%

* Adjusted to reflect the non-credited contributions of $2.22 per hour worked.

History of Actual and Expected Total Contributions Received



ACTIVE INFORMATION

Active Participants by Age and Service as of January 1, 2019

Age	Years of Service										
	<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40+	Total
< 25	-	11	-	-	-	-	-	-	-	-	11
25-29	-	18	6	1	-	-	-	-	-	-	25
30-34	-	7	5	3	-	-	-	-	-	-	15
35-39	-	29	5	5	14	-	-	-	-	-	53
40-44	-	10	5	10	20	14	-	-	-	-	59
45-49	-	6	10	10	16	13	2	1	-	-	58
50-54	-	5	4	6	13	11	13	6	-	-	58
55-59	-	6	2	4	8	15	4	4	3	1	47
60-64	-	-	1	2	-	3	2	1	-	-	9
65-69	-	1	-	-	-	-	-	-	-	-	1
70+	-	-	-	1	-	-	-	-	-	-	1
Totals	-	93	38	42	71	56	21	12	3	1	337
Unrecorded DOB	-	-	-	-	-	-	-	-	-	-	-
Total Active Lives	-	93	38	42	71	56	21	12	3	1	337

INACTIVE VESTED INFORMATION

Inactive Vested Participants by Age as of January 1, 2019

Age Group	Number	Estimated Monthly Deferred Vested Benefits*
< 30	1	$ 163
30-34	6	1,082
35-39	24	8,018
40-44	58	18,417
45-49	82	34,476
50-54	115	41,787
55-59	99	29,887
60-64	80	17,559
65-69	20	5,951
70+	10	1,313
Totals	495	158,653
Unrecorded birth date	-	-
Total inactive vested lives	495	$ 158,653

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

RETIREE INFORMATION

Benefits Being Paid by Form of Payment as of January 1, 2019

Form of Payment	Number	Monthly Benefits Being Paid			
		Total	Average	Smallest	Largest
Life only*	157	$ 113,496	$ 723	$ 33	$ 4,305
Joint & survivor	179	197,560	1,104	26	3,717
Disability	30	38,892	1,296	88	3,245
Beneficiaries	95	32,276	340	17	2,229
Totals	461	$ 382,224	$ 829	$ 17	$ 4,305

Retirees by Age and Form of Payment as of January 1, 2019

Age Group	Form of Benefits Being Paid				
	Life Only*	Joint & Survivor	Disability	Beneficiaries	Total
< 40	-	-	-	2	2
40-44	-	-	1	-	1
45-49	-	-	1	-	1
50-54	-	-	5	-	5
55-59	10	6	11	1	28
60-64	28	33	12	3	76
65-69	29	41	-	11	81
70-74	26	34	-	13	73
75-79	30	28	-	21	79
80-84	21	20	-	28	69
85-89	8	12	-	13	33
90-94	5	3	-	3	11
95+	-	2	-	-	2
Totals	157	179	30	95	461

* Includes retirees receiving life and certain benefits.

RETIREE INFORMATION (CONT.)

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

Age at Retirement	Plan Year Ending December 31,				
	2018	2017	2016	2015	2014
< 55	-	-	-	-	-
55	1	1	3	1	4
56	2	1	-	-	1
57	-	-	-	-	3
58	1	2	2	2	4
59	1	1	2	-	-
60	1	-	-	-	-
61	1	1	1	1	-
62	4	4	1	2	4
63	2	1	1	-	1
64	1	3	-	-	-
65	2	2	1	-	2
66+	-	2	1	3	-
Totals	16	18	12	9	19
Average retirement age	61.4	63.6	60.7	62.4	59.2

PART III: ASSET INFORMATION

MARKET AND ACTUARIAL FUND VALUES

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

Market/Actuarial Value of Fund Investments as of December 31,		*2018*		*2017*		*2016*
Invested assets						
Common stock	$	13,175,636	$	17,072,051	$	15,594,405
Common collective trusts		4,588,685		4,804,662		3,963,119
Hedge fund of funds		5,379,585		6,969,949		6,505,048
Mutual funds		28,173,545		29,505,936		24,637,716
Real estate funds		6,945,334		4,763,168		4,517,581
Limited partnership		4,382,465		4,843,476		5,349,186
Cash		774,832		812,924		622,118
Other		25,040		19,938		22,252
		63,445,122		68,792,104		61,211,425
Net receivables*		215,749		176,776		61,001
Market value	$	63,660,871	$	68,968,880	$	61,272,426
Fund assets - Actuarial value						
Market value	$	63,660,871	$	68,968,880	$	61,272,426
less*: Deferred investment gains and (losses)*		(5,735,784)		1,590,557		(4,261,707)
Actuarial value	$	69,396,655	$	67,378,323	$	65,534,133
Actuarial value as a percentage of market value		109.01%		97.69%		106.96%

* Equals receivables, less any liabilities

FLOW OF FUNDS

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

Plan Year Ending December 31,	2018	2017	2016
Market value at beginning of plan year	$ 68,968,880	$ 61,272,426	$ 57,422,211
Additions			
Employer contributions	3,535,500	3,507,621	3,301,405
*Net investment income**	(4,136,755)	9,006,495	5,098,121
Other income	7,651	3,884	807
	(593,604)	12,518,000	8,400,333
Deductions			
Benefits paid	4,485,083	4,587,698	4,307,702
*Net expenses**	229,322	233,848	242,416
	4,714,405	4,821,546	4,550,118
Net increase (decrease)	(5,308,009)	7,696,454	3,850,215
Adjustment	-	-	-
Market value at end of plan year	$ 63,660,871	$ 68,968,880	$ 61,272,426
Cash flow			
Contr.-ben.-exp.	(1,178,905)	(1,313,925)	(1,248,713)
Percent of assets	-1.85%	-1.91%	-2.04%
Estimated net investment return			
On market value	-6.05%	14.86%	8.98%
On actuarial value	4.78%	4.86%	3.17%

* Investment expenses have been offset against gross investment income.

INVESTMENT GAIN AND LOSS

Investment Gain or Loss
Plan Year Ending December 31, 2018

Expected market value at end of plan year		
Market value at beginning of plan year	$	68,968,880
Employer contributions and non-investment income		3,543,151
Benefits and expenses paid		(4,714,405)
Expected investment income (at 7.75% rate of return)		5,299,702
		73,097,328
Actual market value at end of plan year		63,660,871
less: Expected market value		73,097,328
Investment gain or (loss)	$	(9,436,457)

History of Gains and (Losses)

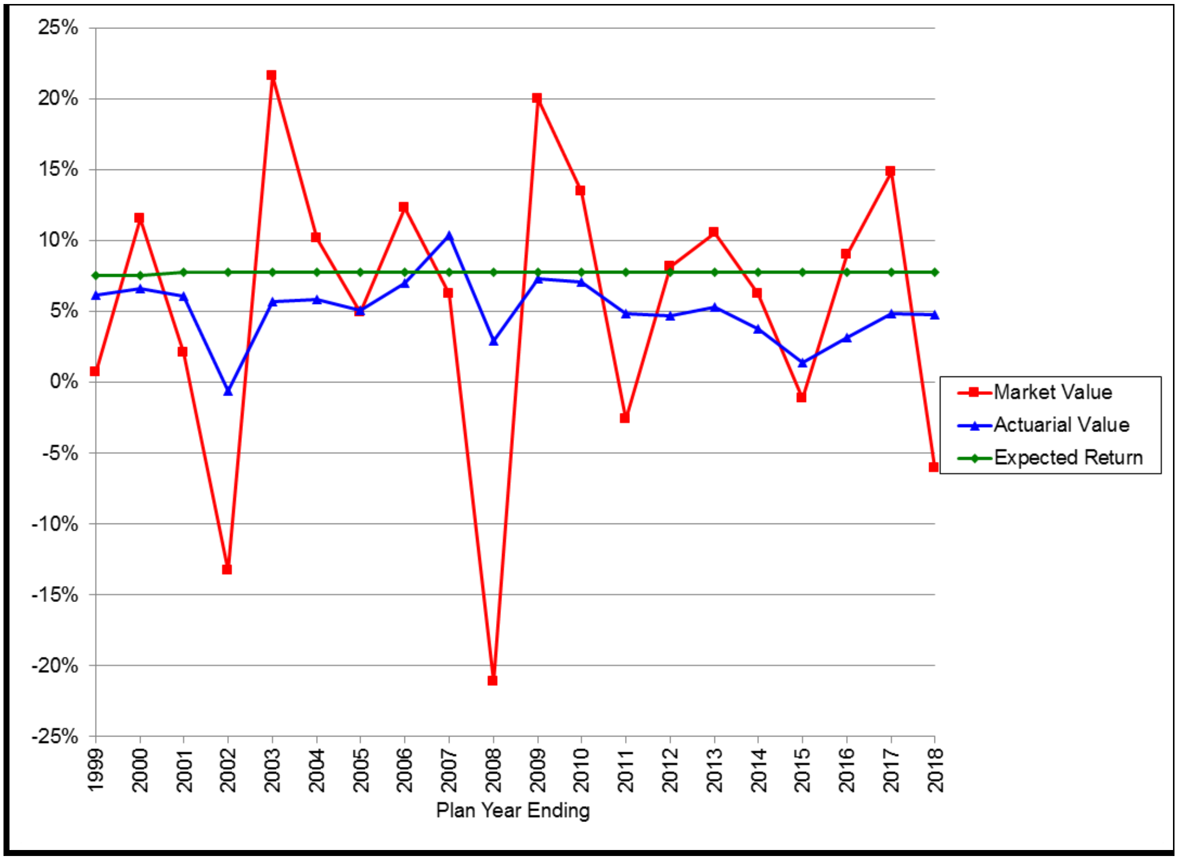
Plan Year Ending December 31,	Investment Gain or (Loss)	Amount Recognized This Year
2018	$ (9,436,457)	$ (1,887,291)
2017	4,308,646	861,729
2016	696,256	139,251
2015	(5,251,542)	(1,050,308)
2014	(867,487)	(173,497)
Total	$ (10,550,584)	$ (2,110,116)

Deferred Investment Gains and (Losses)

Plan Year Ending December 31,	Amount of Gain or (Loss) Deferred as of December 31, 2018	2019	2020	2021
2018	$ (7,549,166)	$ (5,661,874)	$ (3,774,583)	$ (1,887,291)
2017	2,585,188	1,723,458	861,729	-
2016	278,502	139,251	-	-
2015	(1,050,308)	-	-	-
Totals	$ (5,735,784)	$ (3,799,165)	$ (2,912,854)	$ (1,887,291)

RATE OF RETURN ON FUND ASSETS

Historical Rates of Net Investment Return



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

Average Rates of Net Investment Return (geometric average)

	Return on Market Value		Return on Actuarial Value	
	Period Ending December 31,		Period Ending December 31,	
Period	2018	2017	2018	2017
One year	-6.05%	14.86%	4.78%	4.86%
5 years	4.31%	7.75%	3.58%	3.69%
10 years	6.93%	5.07%	4.70%	4.51%
15 years	5.15%	6.97%	5.20%	5.26%
20 years	4.81%	5.64%	5.08%	5.40%

PART IV: ENROLLED ACTUARY'S REPORT

NORMAL COST/ACTUARIAL LIABILITY

Normal Cost as of January 1,		*2019*		*2018*
Active participants	$	1,397,750	$	1,363,627
Anticipated administrative expenses (beg. of year)		231,047		231,047
Total normal cost	$	1,628,797	$	1,594,674

Unfunded Actuarial Liability as of January 1,		*2019*		*2018*
Actuarial liability				
Participants currently receiving benefits	$	42,647,423	$	41,971,269
Inactive vested participants		11,381,343		11,016,850
Active participants		24,124,001		22,844,829
		78,152,767		75,832,948
less: Fund assets (actuarial value)		69,396,655		67,378,323
Unfunded actuarial liability (not less than 0)	$	8,756,112	$	8,454,625

ACTUARIAL LIABILITY RECONCILIATION/PROJECTION

Reconciliation of Unfunded Actuarial Liability

Expected unfunded actuarial liability as of December 31, 2018		
Unfunded actuarial liability as of January 1, 2018	$	8,454,625
Normal cost (including expenses)		1,594,674
Actual contributions		(3,535,500)
Interest to end of plan year		641,820
		7,155,619
Increase (decrease) due to:		
Experience (gain) or loss		1,807,282
Plan amendment		19,336
Change in actuarial assumptions		(226,125)
Change in actuarial method		-
Net increase (decrease)		1,600,493
Unfunded actuarial liability as of January 1, 2019	$	8,756,112

Projection of Actuarial Liability to Year End

Actuarial liability as of January 1, 2019	$	78,152,767
Expected increase (decrease) due to:		
Normal cost (excluding expenses)		1,397,750
Benefits paid		(5,122,476)
Interest on above		(90,170)
Interest on actuarial liability		6,056,839
Net expected increase (decrease)		2,241,943
Expected actuarial liability as of December 31, 2019	$	80,394,710

FUNDED RATIOS

Present Value of Accumulated Benefits/ Funded Ratios Actuarial Study as of January 1,		*2019*		*2018*
Present value of vested accumulated benefits				
Participants currently receiving benefits	$	42,647,423	$	41,971,269
Inactive vested participants		11,218,294		10,872,317
Active participants		22,593,515		21,419,850
Total		76,459,232		74,263,436
Nonvested accumulated benefits		1,693,535		1,569,512
Present value of all accumulated benefits	$	78,152,767	$	75,832,948
Market value of assets	$	63,660,871	$	68,968,880
Funded ratios (Market value)				
Vested benefits		83.3%		92.9%
All accumulated benefits		81.5%		90.9%
Actuarial value of assets	$	69,396,655	$	67,378,323
Funded ratios (Actuarial value used for PPA)				
Vested benefits		90.8%		90.7%
All accumulated benefits		88.8%		88.9%
Interest rate used to value benefits		7.75%		7.75%

FUNDING PERIOD

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

Funding Period Calculation *Actuarial Study as of January 1,*	*2019*	*2018*
Unfunded actuarial liability		
Actuarial liability	$ 85,396,488	$ 82,960,840
less: *Fund assets (actuarial value)*	69,396,655	67,378,323
	15,999,833	15,582,517
Funds available to amortize unfunded		
Anticipated contributions (beg. of yr.)	2,921,129	2,885,244
less*: Normal cost (including expenses)*	865,794	886,676
	$ 2,055,335	$ 1,998,568
Funding period (years)	11	12

CURRENT LIABILITY

Current Liability is determined in a manner similar to the value of accrued benefits, but using an interest rate assumption within an acceptable range determined by the IRS. For this report we used an interest rate assumption of 3.06%. The current liability is used only in the determination of the maximum deductible employer contribution and full funding limit under the Internal Revenue Code, and is not used for any other purpose.

Current Liability as of January 1, 2019

Vested current liability		
Participants currently receiving benefits	$	66,356,763
Inactive vested participants		23,873,186
Active participants		51,130,459
		141,360,408
Nonvested current liability		
Inactive vested participants		217,956
Active participants		2,861,944
		3,079,900
Total current liability	$	144,440,308

Projection of Current Liability to Year End

Current liability as of January 1, 2019	$	144,440,308
Expected increase (decrease) due to:		
Benefits accruing		3,505,525
Benefits paid		(5,122,476)
Interest on above		28,895
Interest on current liability		4,419,873
Net expected increase (decrease)		2,831,817
Expected current liability as of December 31, 2019	$	147,272,125

FUNDING STANDARD ACCOUNT

Funding Standard Account Plan Year Ending December 31,	2019 (Projected)	2018 (Final)
Charges		
Prior year funding deficiency	$ -	$ -
Normal cost (including expenses)	1,628,797	1,594,674
Amortization charges (see Appendix C)	6,053,683	5,891,722
Interest on above	595,393	580,196
Total charges	8,277,873	8,066,592
Credits		
Prior year credit balance	15,597,743	14,525,816
Employer contributions	3,044,578	3,535,500
Amortization credits (see Appendix C)	3,453,863	4,028,089
Interest on above	1,594,477	1,574,930
ERISA full funding credit	-	-
Total credits	23,690,661	23,664,335
Credit balance (credits less charges)	$ 15,412,788	$ 15,597,743

FUNDING STANDARD ACCOUNT WITHOUT AMORTIZATION EXTENSION

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

Funding Standard Account Plan Year Ending December 31,	*2019 (Projected)*	*2018 (Final)*
Charges		
Prior year funding deficiency	$ -	$ -
Normal cost (including expenses)	1,628,797	1,594,674
Amortization charges (see Appendix C)	5,086,658	4,957,638
Interest on above	520,446	507,802
Total charges	7,235,901	7,060,114
Credits		
Prior year credit balance	6,652,123	5,289,528
Employer contributions	3,044,578	3,535,500
Amortization credits (see Appendix C)	3,453,863	4,028,089
Interest on above	901,192	859,120
ERISA full funding credit	-	-
Total credits	14,051,756	13,712,237
Credit balance (credits less charges)	$ 6,815,855	$ 6,652,123

FULL FUNDING LIMIT

Projection of Assets for Full Funding Limit	*Market Value*	*Actuarial Value*
Asset value as of January 1, 2019	$ 63,660,871	$ 69,396,655
Expected increase (decrease) due to:		
Investment income	4,725,922	5,170,445
Benefits paid	(5,122,476)	(5,122,476)
Expenses	(240,000)	(240,000)
Net expected increase (decrease)	(636,554)	(192,031)
Expected value as of December 31, 2019*	$ 63,024,317	$ 69,204,624

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

Full Funding Limit as of December 31, 2019	*For Minimum Required*	*For Maximum Deductible*
ERISA full funding limit (not less than 0)		
Actuarial liability	$ 80,394,710	$ 80,394,710
less: *Assets (lesser of market or actuarial)*	63,024,317	63,024,317
plus: Credit balance (w/interest to year end)	16,806,568	n/a
	34,176,961	17,370,393
ERISA full funding limit without extension (not less than 0)		
Actuarial liability	80,394,710	n/a
less: *Assets (lesser of market or actuarial)*	63,024,317	n/a
plus: *Credit bal. w/o ext. (w/int. to year end)*	7,167,663	n/a
	24,538,056	n/a
Full funding limit override (not less than 0)		
90% of current liability	132,544,913	132,544,913
less: *Assets (actuarial value)*	69,204,624	69,204,624
	63,340,289	63,340,289
Full funding limit (greater of ERISA limit and full funding override)		
With amortization extension	$ 63,340,289	$ 63,340,289
Without amortization extension	$ 63,340,289	n/a

MINIMUM REQUIRED CONTRIBUTION AND FULL FUNDING CREDIT

Minimum Required Contribution Plan Year Beginning January 1, 2019	Without Extension	With Extension
Minimum funding cost		
Normal cost (including expenses)	$ 1,628,797	$ 1,628,797
Net amortization of unfunded liabilities	1,632,795	2,599,820
Interest to end of plan year	252,771	327,718
	3,514,363	4,556,335
Full funding limit	63,340,289	63,340,289
Net charge to funding std. acct. (lesser of above)	3,514,363	4,556,335
less: *Credit balance with interest to year end*	7,167,663	16,806,568
Minimum Required Contribution (not less than 0)	$ -	$ -
Effect of extension		$ -

Full Funding Credit to Funding Standard Account Plan Year Ending December 31, 2019	Without Extension	With Extension
Full funding credit (not less than 0)		
Minimum funding cost (n.c., amort., int.)	$ 3,514,363	$ 4,556,335
less: *full funding limit*	63,340,289	63,340,289
	$ -	$ -

MAXIMUM DEDUCTIBLE CONTRIBUTION

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

Maximum Deductible Contribution
Plan Year Beginning January 1, 2019

Preliminary deductible limit		
Normal cost (including expenses)	$	1,628,797
10-year limit adjustment (using "fresh start" alternative)		1,197,441
Interest to end of plan year		219,034
		3,045,272
Full funding limit		63,340,289
Maximum deductible contribution override		
140% of vested current liability projected to December 31, 2019		201,784,579
less*: Actuarial value of assets projected to December 31, 2019*		69,204,624
		132,579,955
Maximum deductible contribution*	$	132,579,955
Anticipated employer contributions	$	3,044,578

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

HISTORY OF UNFUNDED VESTED BENEFITS

Presumptive Method

December 31,	*Vested Benefits Interest Rate*	*Value of Vested Benefits*	*Asset Value**	*Unfunded Vested Benefits*	*Unamortized Portion of VAB*
1999	7.50%	26,263,536	36,517,234	(10,253,698)	
2000	7.75%	30,412,402	39,264,310	(8,851,908)	
2001	7.75%	35,711,260	42,043,457	(6,332,197)	
2002	7.75%	41,469,062	42,019,063	(550,001)	
2003	7.75%	44,155,894	44,222,751	(66,857)	
2004	7.75%	46,823,836	46,750,441	73,395	
2005	7.75%	49,771,921	48,751,674	1,020,247	
2006	7.75%	52,458,661	51,652,635	806,026	
2007	7.75%	54,442,221	56,252,948	(1,810,727)	
2008	7.75%	55,965,916	52,505,644	3,460,272	
2009	7.75%	58,437,048	59,619,259	(1,182,211)	
2010	7.75%	60,298,308	62,314,914	(2,016,606)	
2011	7.75%	62,119,705	63,493,973	(1,374,268)	
2012	7.75%	64,442,727	64,296,033	146,694	
2013	7.75%	66,810,445	65,246,057	1,564,388	
2014	7.75%	69,883,900	65,444,610	4,439,290	
2015	7.75%	71,846,693	64,749,401	7,097,292	
2016	7.75%	70,725,805	65,534,133	5,191,672	4,333,777
2017	7.75%	74,263,436	67,378,323	6,885,113	4,171,034
2018	7.75%	76,459,232	69,396,655	7,062,577	3,995,678

* Actuarial value

TERMINATION BY MASS WITHDRAWAL

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

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

As required by regulation, interest rates of 2.84% for the first 20 years and 2.76% for each year thereafter and the GAM 94 Basic Mortality Table projected to 2028 were used.

Illustrative Section 4281 Valuation as of December 31, 2018

Value of nonforfeitable benefits		
Participants currently receiving benefits	$	66,476,637
Inactive vested participants		24,595,217
Active participants		56,042,548
Expenses (per Section 4281 of ERISA)		1,034,723
		148,149,125
less: Fund assets (market value)		63,660,871
Value of nonforfeitable benefits in excess of (less than) fund assets	$	84,488,254

ASC 960 INFORMATION

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

Present Value of Accumulated Benefits *Actuarial Study as of January 1,*		*2019*		*2018*
Present value of vested accumulated benefits				
Participants currently receiving benefits	$	42,647,423	$	41,971,269
Expenses on parts. currently rec. benefits		2,238,990		2,308,420
Other participants		33,811,809		32,292,167
Expenses on other participants		1,775,120		1,776,069
		80,473,342		78,347,925
Present value of nonvested accumulated benefits				
Nonvested accumulated benefits		1,693,535		1,569,512
Expenses on nonvested benefits		88,911		86,323
		1,782,446		1,655,835
Present value of all accumulated benefits	$	82,255,788	$	80,003,760
Market value of plan assets	$	63,660,871	$	68,968,880
Interest rate used to value benefits		7.75%		7.75%

Changes in Present Value of Accumulated Benefits		
Present value of accumulated benefits as of January 1, 2018	$	80,003,760
Increase (decrease) due to:		
Plan amendment		20,352
Change in actuarial assumptions		(433,896)
Benefits accumulated and experience gain or loss		1,179,686
Interest due to decrease in discount period		6,200,291
Benefits paid		(4,485,083)
Operational expenses paid		(229,322)
Net increase (decrease)		2,252,028
Present value of accumulated benefits as of January 1, 2019	$	82,255,788

APPENDICES

PLAN HISTORY

Origins/Purpose

The Outstate Michigan Trowel Trades Pension Plan was established January 1, 1972 as a result of a merger between the Pension Plans of the Outstate O.P.C.M.I.A. (which was established May 1, 1963) and the Michigan Highway Construction Industry Cement Masons' Pension Plan (which was established September 1, 1965).

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

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

Employer Contributions

The Pension Plan is financed entirely by contributions from the employers as specified in the applicable Collective Bargaining Agreements. Following is a history of recent hourly contribution rates in effect for each local and craft.

Local	Craft	Hourly Contribution Rate*	Effective Date
Benton Harbor/St. Joe	D0	$ 7.17	June 1, 2017
Big Rapids	E0	$ 6.67	June 1, 2017
Flint	F0	$ 7.17	June 1, 2017
Grand Rapids/Muskegon	H1	$ 7.07	June 1, 2017
Highway Construction Zone 1	H0	$ 6.00	June 1, 2017
Highway Construction Zone 2	H0	$ 6.00	June 1, 2017
Kalamazoo/Battle Creek	I0	$ 7.12	June 1, 2017
Lansing/Jackson	J0	$ 7.17	June 1, 2017
Lapeer	K0	$ 7.17	June 1, 2017
Saginaw	M0	$ 6.67	June 1, 2017
Traverse City	N0	$ 6.67	June 1, 2017
Upper Peninsula	O0/P0	$ 4.42/$ 7.17	June 1, 2018
Southwest	P0	$ 6.72	June 1, 2018
Lansing/Jackson	P0	$ 6.82	June 1, 2018
Flint	P0	$ 7.17	June 1, 2018
Saginaw/Bay City	P0	$ 7.17	June 1, 2018

* These rates include $2.22 of non-credited contribution.

Reciprocity

The Trustees have entered into Money Follows the Man Reciprocity Agreements with the Trustees of several other Pension Plans. The Trustees have also entered into a Pro-Rata Reciprocity Agreement with the Operative Plasterers' and Cement Masons International Association of the United States and Canada, the Michigan BAC Pension Plan, and the Michigan Laborers' Pension Plan.

SUMMARY OF PLAN PROVISIONS

Plan year

The 12-month period beginning January 1 and ending the following December 31.

Participation

12 consecutive month period with 500 hours.

Year of service

Plan Year with at least 500 hours.

Break in service

Plan Year with less than 500 hours.

Active participant

A participant who has not become a retired, deceased or disabled participant and who has not suffered a permanent break in service and who *has* accrued at least one year of service in either the current plan year at the time of reference or in either of the two preceding plan years.

Inactive participant

A participant who has not become a retired, deceased or disabled participant and who has not suffered a permanent break in service and who has *not* accrued at least one year of service in either the current plan year at the time of reference or in either of the two preceding plan years.

Normal retirement benefit

Eligibility

Age 65 or 5th anniversary of participation, if later.

Monthly amount

Accrued benefit as of January 1, 1976; plus 3.60% of contributions for the period January 1, 1976 through December 31, 2003; plus 1.70% of contributions for the period January 1, 2004 through May 31, 2008; plus 1.70% of credited contributions thereafter. Payable for life.

No future service credit is given for less than 300 hours of work in plan years 1976-2010. No future service credit is given for less than 500 hours of work in plan years 2011 and after. This requirement does not apply during participant's initial or last year of participation before retirement.

Early retirement benefit

Eligibility

Age 55 and 10 years of service. Retired from active status

Monthly amount

Normal, reduced by ½ of 1% for each month under age 62 (reduction is calculated from age 58 if participant has 25 or more years of service). Payable for life.

SUMMARY OF PLAN PROVISIONS (CONT.)

Total and permanent disability benefit	
Eligibility	Disabled while active.
Monthly amount	10 + years of service: 75% of normal payable until the earlier of age 65, recovery or death. Normal at age 65.
or	
Single sum amount	Less than 10 years of service: Greater of 75% of contributions for which participant received any special or future service credit or the single sum actuarial equivalent of the basic vested benefit.
Vested benefit	
Eligibility	Terminated. 5 years of service.
Monthly amount	Deferred normal or early, if eligible. Payable for life.
Vested early benefit	
Eligibility	Terminated. 10 years of service.
Monthly amount	Normal reduced by an actuarial equivalent factor for each month under age 65.
Optional forms of payment	• Joint and 50% survivor (with popup)* • Joint and 75% survivor (with popup)* • Joint and 100% survivor (with popup)* • Life with 10 years guaranteed * Effective June 1, 2016, inactive vested participants who retire will no longer receive the "pop up" feature.
Pre-retirement single sum death benefit	
Eligibility	Death of active, disabled, or inactive vested participant who is ineligible for surviving spouse benefit and who has not yet received any retirement benefits.
Single sum amount	75% of contributions payable to beneficiary of active or disabled participant. 50% of contributions payable to beneficiary of inactive vested participant.

SUMMARY OF PLAN PROVISIONS (CONT.)

Pre-retirement surviving spouse benefit	
Eligibility	Death of vested participant with eligible spouse.
Monthly amount	75% of participant's joint and 75% survivor benefit (50% of participant's joint and 50% survivor benefit for inactive vested participants). Payable to spouse for life beginning at earliest retirement age of participant. Spouse may elect single sum death benefit.
Post-retirement death benefit	
Eligibility	Death of participant receiving normal, early or vested benefits. Not eligible if receiving joint and survivor.
Single sum amount	Pre-retirement single sum death less benefits paid to participant. Payable to beneficiary.

HISTORICAL PLAN MODIFICATIONS

Special and future service credit/Retiree increase	
Effective date	January 1, 1998
Adoption date	August 18, 1997
Provisions	The special and future service credit was increased from 3.30% to 3.45% and the lives receiving benefits received a 4½% increase.
Vesting eligibility	
Effective date	January 1, 1998
Adoption date	August 18, 1997
Provisions	Eligibility for vesting changed from a 5/10 year graded scale to 100% after 5 years of vesting service for active participants who earn at least one hour of service on or after January 1, 1998.
Special and future service credit/Retiree increase	
Effective date	January 1, 1999
Adoption date	May 6, 1998
Provisions	The special and future service credit was increased from 3.45% to 3.55% and the lives receiving benefits received a 3% increase.
Special and future service credit/Retiree increase	
Effective date	January 1, 2000
Adoption date	January 20, 2000
Provisions	The special and future service credit was increased from 3.55% to 3.60% and the lives receiving benefits received a 2% increase.

HISTORICAL PLAN MODIFICATIONS (CONT.)

Early retirement benefit	
Effective date	January 1, 2000
Adoption date	January 20, 2000
Provisions	The early retirement benefit was improved by changing the plan so that the early retirement reduction factor is calculated from age 60 if the participant has 25 or more years of service. If the participant does not meet the 25-year requirement, the reduction factor is calculated from age 62.
New optional forms	
Effective date	January 1, 2000
Adoption date	January 20, 2000
Provisions	Joint and 75% survivor, joint and 100% survivor and life with 10-years certain annuities were added as optional forms of payment under the plan.
Early retirement benefit	
Effective date	January 1, 2001
Adoption date	January 23, 2001
Provisions	The early retirement benefit was improved by changing the plan so that the early retirement reduction factor is calculated from age 58 if the participant has 25 or more years of service. If the participant does not meet the 25-year requirement, the reduction factor is calculated from age 62.
Special and future service credit/Retiree increase	
Effective date	January 1, 2004
Adoption date	December 20, 2002
Provisions	The special and future service credit was changed from 3.60% to 1.70% for accruals on and after January 1, 2004.

HISTORICAL PLAN MODIFICATIONS (CONT.)

Pre-retirement surviving spouse benefit

Effective date	January 1, 2007
Adoption date	June 12, 2008
Provisions	The Plan's Qualified Pre-Retirement Survivor Annuity Benefit (QPSA) was increased from 50% to 75%. Further, the age reduction has been eliminated.

Disability benefit

Effective date	January 1, 2011
Adoption date	October 27, 2010
Provisions	Disability benefits retroactive to the date of disablement have been eliminated. The disability benefit has also been lowered from 100% to 75% of the participant's accrued benefit, for disabilities beginning on or after January 1, 2011.

Benefit accrual and service year

Effective date	January 1, 2011
Adoption date	October 27, 2010
Provisions	The hours requirement for a year of service and benefit accrual was increased from 300 to 500 hours.

Early Retirement Reduction Factor

Effective date	June 1, 2016
Adoption date	April 18, 2016
Provisions	For inactive participants retiring on or after June 1, 2016, the early retirement factor was changed from ½ of 1% for each month before age 62 to an actuarial equivalent factor for each month before age 65.

HISTORICAL PLAN MODIFICATIONS (CONT.)

Pre-Retirement Survivor Annuity	
Effective date	June 1, 2016
Adoption date	April 18, 2016
Provisions	The 75% Pre-Retirement Survivor Annuity for surviving spouses was replaced with a 50% Pre-Retirement survivor annuity for inactive vested participants.
Single sum death benefit	
Effective date	June 1, 2016
Adoption date	April 18, 2016
Provisions	The pre-retirement single sum death benefit payable following the death of an inactive participant was eliminated for inactive vested participants.
"Pop-Up" on Joint and Survivor	
Effective date	June 1, 2016
Adoption date	April 18, 2016
Provisions	The "Pop-Up" feature on Joint and Survivor Benefits was eliminated for inactive vested participants.
Single sum death benefit	
Effective date	October 1, 2018
Adoption date	December 5, 2018
Single sum amount	A pre-retirement single sum death benefit payable following the death of an inactive vested participant was added to the plan, payable immediately to the beneficiary at 50% of contributions.

ACTUARIAL ASSUMPTIONS

The following assumptions are used throughout this report except as specifically noted herein.

Valuation date	January 1, 2019
Interest rates	
ERISA rate of return used to value liabilities	7.75% per year net of investment expenses
Unfunded vested benefits	7.75% per year net of investment expenses
Current liability	3.06% (in accordance with Section 431(c)(6) of the Internal Revenue Code)
Lump sum disability benefit	417(e) lump sum segment rates in effect 1 month before the valuation date. As of December 1, 2018, the segment rates were: • 3.38% for payments scheduled in the first five years out, • 4.32% for payments in the next 15 years out, • 4.69% for payments scheduled more than 20 years out.
Operational expenses	
Funding	$240,000 per year excluding investment expenses.
ASC 960	A 5.25% load was applied to the accrued liabilities for 2019 (5.50% for 2018).
Loading for pop-up feature	Liabilities for non-retired active participants' benefits to be paid after retirement increased 0.5%; liabilities for retired participants receiving a joint and survivor form of benefit increased by 1.8%.

ACTUARIAL ASSUMPTIONS (CONT.)

Mortality

Assumed plan mortality

105% of the RP-2006 Blue Collar Mortality Tables (the RP 2014 table adjusted backward to 2006 with the MP-2014 projection scale) for employees and healthy annuitants projected forward using the MP-2018 projection scale.

Current liability

Separate annuitant and non-annuitant rates based on the RP-2000 Mortality Tables Report developed for males and females as prescribed by Section 431(c)(6) of the Internal Revenue Code.

Withdrawal

T-3 Turnover Table from The Actuary's Pension Handbook (less GAM 51 mortality) – specimen rates shown below. Assumed rate during second year of employment is 25%* and 25% for the next two years.

Age	Withdrawal Rate
25	.0527
30	.0483
35	.0447
40	.0384
45	.0321
50	.0152
55	.0033

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

Disability

1964 OASDI Disability Table for males. Specimen rates shown below:

Age	Disability Rate
25	.0009
30	.0011
35	.0015
40	.0022
45	.0036
50	.0061
55	.0101
60	.0163

ACTUARIAL ASSUMPTIONS (CONT.)

Future retirement rates
Active lives

According to the following schedule:

	Retirement Rates:	
Age	<25 yrs svc	25+ yrs svc
55-56	.02	.15
57	.10	.40
58	.10	.70
59-61	.10	.25
62-64	.40	.25
65	1.00	1.00

Resulting in an average expected retirement age of 59.8.

Inactive vested lives

Age 55, or the earliest eligible retirement age if later.

Disabled lives

Disability benefit assumed payable until the earlier of age 65, recovery or death. Then normal retirement benefit commences.

Future hours worked

Vested lives — 1,500 hours per year, 0 after assumed retirement age

Non-vested lives — 1,200 hours per year, 0 after assumed retirement age

Future hourly contribution rate

Individual's average credited rate contributed for the most recent plan year adjusted for any rate changes in the past year and for non-credited contributions. The credited rate cannot be lower than the lowest negotiated rate or higher than the highest negotiated rate.

Age of participants with unrecorded birth dates

Based on average entry age of participants with recorded birth dates and same vesting status.

Marriage assumptions

80% assumed married with the male spouse 3 years older than his wife

Optional form assumption

All non-retired participants assumed to elect the life annuity with 2 years certain form of benefit.

Inactive vested lives over age 70

Continuing inactive vested participants over age 70 are assumed deceased and are not valued.

QDRO benefits

Benefits to alternate payee included with participant's benefit until payment commences

ACTUARIAL ASSUMPTIONS (CONT.)

Section 415 limit assumptions	
Dollar limit	$225,000 per year
Assumed form of payment for those limited by Section 415	Qualified joint and 100% survivor annuity
Benefits not valued	None

RATIONALE FOR SELECTION OF ACTUARIAL ASSUMPTIONS

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

ERISA rate of return used to value liabilities	Future rates of return were modeled based on the Plan's current investment policy asset allocation and composite, long-term capital market assumptions taken from Horizon Actuarial's 2018 survey of investment consultants. Based on this analysis, we selected a final assumed rate of 7.75%, which we feel is reasonable. This rate may not be appropriate for other purposes such as settlement of liabilities. Due to the special rules related to withdrawal liability for a construction industry plan and the nature of the building trades industry, we believe the valuation interest rate is also appropriate for withdrawal liability purposes.
Mortality	The RP-2006 Blue Collar Mortality Tables for employees and healthy annuitants projected forward using the MP-2018 projection scale was chosen as the base table for this population. The blue collar table was chosen based on the industry of plan participants. Finally, a 105% multiplier was applied in order to more closely match projected deaths to actual post-retirement death experience. The period of actual data studied to develop this multiplier was from January 1, 2014 to December 31, 2018 for this plan, blended with a study of deaths for larger plans in similar industries.
Retirement	Actual rates of retirement by age were last studied for this plan for the period January 1, 2012 to December 31, 2016. The assumed future rates of retirement were selected based on the results of this study. No adjustments were deemed necessary at this time.
Withdrawal	Actual rates of withdrawal by age were last studied for this plan for the period January 1, 2011 to December 31, 2015. The assumed future rates of withdrawal were selected based on the results of this study. No adjustments were deemed necessary at this time.
Future hours worked	Based on review of recent plan experience.

ACTUARIAL ASSUMPTIONS USED FOR PROJECTIONS

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

Assumed return on fund assets	
Current year projections	7.25% for the first 10 years (1/1/2019-12/31/2028) 7.75% thereafter
Prior year projections	7.25% for the first 10 years (1/1/2018-12/31/2027) 7.75% thereafter
Expenses	
Current year projections	$240,000 per year excluding investment expenses.
Prior year projections	$240,000 per year excluding investment expenses.
Future total hours worked	
Current year projections	475,000 for the plan year ending 2019 and thereafter
Prior year projections	450,000 for the plan year ending 2018 and thereafter
Contribution rate increases	
Current year projections	None
Prior year projections	None
Plan changes since prior year	A pre-retirement single sum death benefit payable following the death of an inactive vested participant was added to the plan, payable immediately to the beneficiary at 50% of contributions.
Open group projections	
Current year projections	Stable population assumed with new entrants replacing active participants as they withdraw, retire or die. New entrants are based upon entry age of actual new entrants over the last 5 years.
Prior year projections	Stable population assumed with new entrants replacing active participants as they withdraw, retire or die. New entrants are based upon entry age of actual new entrants over the last 5 years.

ACTUARIAL ASSUMPTIONS USED FOR PROJECTIONS (CONT.)

Stochastic modeling	500 trials. Future returns are modeled using an expected return of 7.10% for the first 10 years and 8.34% thereafter and a standard deviation of 12.18%, which is representative of the plan's investment portfolio. The expected return above is a one year value and is not representative of longer term geometric return as considered when setting the ERISA return assumption.

ACTUARIAL METHODS

Funding method	
ERISA Funding	Traditional unit credit cost method, effective January 1, 2015.
Funding period	Individual entry age normal with costs spread as a level dollar amount over service
Population valued	
Actives	Participants in the plan who accrued a year of service during the preceding plan year and who had non-reciprocity hours during the preceding plan year
Inactive vested	Vested participants with no non-reciprocity hours during the preceding plan year or vested participants who had reciprocity hours during the preceding plan year
Retirees	Participants and beneficiaries in pay status as of the valuation date.
Asset valuation method	
Actuarial value	Smoothed market value with phase-in effective January 1, 1999. Each year's gain (or loss) is spread over a period of 5 years. The actuarial value is limited to not less than 80% and not more than 120% of the actual market value of assets in any plan year.
Unfunded vested benefits	For the presumptive method, actuarial value, as described above, is used
Pension Relief Act of 2010	• 10-year smoothing was elected with respect to the loss incurred during the plan year ended in 2008. • The 130% cap on actuarial value of assets was elected for the plan year beginning in 2009.
Effective date of amortization extension	January 1, 2010

Date Established	Source of Change in Unfunded Liability	Original Amount	Original Period	Remaining Period Years	Remaining Period Months	1/1/2019 Outstanding Balance	1/1/2019 Amortization Payment
Charges							
1/1/1978	Initial Unfunded		45	4	0	189,189	52,716
1/1/1979	Amendment		45	5	0	125,038	28,874
1/1/1980	Amendment		45	6	0	110,202	21,956
1/1/1985	Amendment		35	1	0	18,934	18,934
1/1/1986	Amendment		35	2	0	6,960	3,610
1/1/1986	Assumption		35	2	0	67,981	35,259
1/1/1987	Amendment		35	3	0	185,298	66,433
1/1/1988	Amendment		35	4	0	88,044	24,536
1/1/1989	Amendment		35	5	0	90,652	20,932
1/1/1989	Method		34	4	0	88,912	24,777
1/1/1990	Amendment		35	6	0	432,138	86,100
1/1/1991	Assumption		35	7	0	278,346	49,192
1/1/1993	Amendment		35	9	0	290,237	42,672
1/1/1993	Assumption		35	9	0	113,103	16,630
1/1/1995	Assumption	535,520	35	11	0	290,810	37,349
1/1/1996	Assumption	1,210,310	35	12	0	704,286	85,614
1/1/1997	Amendment	318,428	35	13	0	196,928	22,808
1/1/1997	Assumption	83,931	35	13	0	51,903	6,011
1/1/1998	Amendment	892,619	35	14	0	582,750	64,651
1/1/1999	Amendment	807,784	35	15	0	553,411	59,090
1/1/1999	Assumption	2,846,312	35	15	0	1,949,942	208,208
1/1/2000	Assumption	763,910	35	16	0	546,414	56,379
1/1/2001	Amendment	1,524,278	35	17	0	1,133,385	113,399
1/1/2001	Assumption	55,139	35	17	0	40,992	4,102
1/1/2001	Experience Loss	4,740,024	20	2	0	629,045	326,250
1/1/2002	Assumptions	1,518,437	35	18	0	1,168,709	113,734
1/1/2002	Experience Loss	1,645,461	20	3	0	337,076	120,846
1/1/2003	Assumptions	299,355	35	19	0	237,708	22,559
1/1/2003	Experience Loss	7,932,235	20	4	0	2,200,560	613,183
1/1/2005	Experience Loss	1,612,524	20	6	0	674,755	134,437
1/1/2006	Experience Loss	2,125,905	20	7	0	1,031,891	182,372
1/1/2007	Experience Loss	1,832,215	20	8	0	1,006,602	161,026
1/1/2008	Assumptions	34,081	20	9	0	20,796	3,058
1/1/2009	Amendment	146,878	20	10	0	98,106	13,416
1/1/2009	Experience Loss	7,556,829	20	10	0	5,047,441	690,262

Date Established	Source of Change in Unfunded Liability	Original Amount	Original Period	Remaining Period		1/1/2019 Outstanding Balance	1/1/2019 Amortization Payment
				Years	Months		
1/1/2012	Experience Loss	1,912,754	15	8	0	1,276,737	204,238
1/1/2013	Experience Loss	2,106,787	15	9	0	1,530,060	224,956
1/1/2014	Experience Loss	2,056,465	15	10	0	1,605,670	219,583
1/1/2015	Assumptions	1,449,529	15	11	0	1,205,154	154,776
1/1/2015	Experience Loss	3,402,303	15	11	0	2,828,706	363,288
1/1/2016	Experience Loss	4,002,646	15	12	0	3,515,869	427,391
1/1/2017	Assumptions	236,918	15	13	0	218,435	25,297
1/1/2017	Experience Loss	3,415,873	15	13	0	3,149,384	364,737
1/1/2018	Assumptions	940,061	15	14	0	904,760	100,377
1/1/2018	Experience Loss	2,272,247	15	14	0	2,186,919	242,624
1/1/2019	Amendment	19,336	15	15	0	19,336	2,065
1/1/2019	Experience Loss	1,807,282	15	15	0	1,807,282	192,976
				Total Charges:		**40,836,856**	**6,053,683**

Credits

1/1/2009	Combined Credits	17,613,296	14	4	0	7,012,721	1,954,075
1/1/2010	Experience Gain	598,728	15	6	0	320,875	63,930
1/1/2011	Amendment	976,701	15	7	0	590,090	104,289
1/1/2011	Assumptions	197,776	15	7	0	119,486	21,118
1/1/2011	Experience Gain	602,507	15	7	0	364,008	64,334
1/1/2012	Assumptions	339,642	15	8	0	226,701	36,266
1/1/2015	Method	5,058,551	10	6	0	3,472,162	691,781
1/1/2016	Amendment	2,611,164	15	12	0	2,293,613	278,812
1/1/2016	Assumptions	4,940	15	12	0	4,341	527
1/1/2017	Amendment	2,009,662	15	13	0	1,852,879	214,586
1/1/2019	Assumptions	226,125	15	15	0	226,125	24,145
				Total Credits:		**16,483,001**	**3,453,863**

Date Established	Source of Change in Unfunded Liability	Original Amount	Original Period	Remaining Period		1/1/2019 Outstanding Balance	1/1/2019 Amortization Payment
				Years	Months		
					Net Charges:	**24,353,855**	**2,599,820**
					Less Credit Balance:	15,597,743	
					Less Reconciliation Balance:	0	
					Unfunded Actuarial Liability:	**8,756,112**	

Date Established	Source of Change in Unfunded Liability	Original Amount	Original Period	Remaining Period Years	Remaining Period Months	1/1/2019 Outstanding Balance	1/1/2019 Amortization Payment
Charges							
1/1/1980	Amendment		40	1	0	28,119	28,119
1/1/1990	Amendment		30	1	0	110,275	110,275
1/1/1991	Assumption		30	2	0	118,064	61,229
1/1/1993	Amendment		30	4	0	182,230	50,783
1/1/1993	Assumption		30	4	0	71,022	19,790
1/1/1995	Assumption	535,520	30	6	0	215,772	42,985
1/1/1996	Assumption	1,210,310	30	7	0	549,983	97,202
1/1/1997	Amendment	318,428	30	8	0	159,928	25,587
1/1/1997	Assumption	83,931	30	8	0	42,141	6,744
1/1/1998	Amendment	892,619	30	9	0	488,087	71,760
1/1/1999	Amendment	807,784	30	10	0	475,112	64,970
1/1/1999	Assumption	2,846,312	30	10	0	1,674,015	228,930
1/1/2000	Assumption	763,910	30	11	0	478,628	61,469
1/1/2001	Amendment	1,524,278	30	12	0	1,009,433	122,707
1/1/2001	Assumption	55,139	30	12	0	36,507	4,439
1/1/2002	Assumptions	1,518,437	30	13	0	1,055,484	122,237
1/1/2003	Assumptions	299,355	30	14	0	217,195	24,099
1/1/2005	Experience Loss	1,612,524	15	1	0	172,171	172,171
1/1/2006	Experience Loss	2,125,905	15	2	0	437,671	226,998
1/1/2007	Experience Loss	1,832,215	15	3	0	545,722	195,638
1/1/2008	Assumptions	34,081	15	4	0	13,060	3,639
1/1/2009	Amendment	146,878	15	5	0	67,927	15,683
1/1/2009	Experience Loss	7,556,829	15	5	0	3,494,379	806,896
1/1/2012	Experience Loss	1,912,754	15	8	0	1,276,737	204,238
1/1/2013	Experience Loss	2,106,787	15	9	0	1,530,060	224,956
1/1/2014	Experience Loss	2,056,465	15	10	0	1,605,670	219,583
1/1/2015	Assumptions	1,449,529	15	11	0	1,205,154	154,776
1/1/2015	Experience Loss	3,402,303	15	11	0	2,828,706	363,288
1/1/2016	Experience Loss	4,002,646	15	12	0	3,515,869	427,391
1/1/2017	Assumptions	236,918	15	13	0	218,435	25,297
1/1/2017	Experience Loss	3,415,873	15	13	0	3,149,384	364,737
1/1/2018	Assumptions	940,061	15	14	0	904,760	100,377
1/1/2018	Experience Loss	2,272,246	15	14	0	2,186,918	242,624
1/1/2019	Amendment	19,336	15	15	0	19,336	2,065
1/1/2019	Experience Loss	1,807,282	15	15	0	1,807,282	192,976

Date Established	Source of Change in Unfunded Liability	Original Amount	Original Period	Remaining Period Years	Remaining Period Months	1/1/2019 Outstanding Balance	1/1/2019 Amortization Payment
				Total Charges:		**31,891,236**	**5,086,658**
Credits							
1/1/2009	Combined Credits	17,613,296	14	4	0	7,012,721	1,954,075
1/1/2010	Experience Gain	598,728	15	6	0	320,875	63,930
1/1/2011	Amendment	976,701	15	7	0	590,090	104,289
1/1/2011	Assumptions	197,776	15	7	0	119,486	21,118
1/1/2011	Experience Gain	602,507	15	7	0	364,008	64,334
1/1/2012	Assumptions	339,642	15	8	0	226,701	36,266
1/1/2015	Method	5,058,551	10	6	0	3,472,162	691,781
1/1/2016	Amendment	2,611,164	15	12	0	2,293,613	278,812
1/1/2016	Assumptions	4,940	15	12	0	4,341	527
1/1/2017	Amendment	2,009,662	15	13	0	1,852,879	214,586
1/1/2019	Assumptions	226,125	15	15	0	226,125	24,145
				Total Credits:		**16,483,001**	**3,453,863**
				Net Charges:		**15,408,235**	**1,632,795**
				Less Credit Balance:		6,652,123	
				Less Reconciliation Balance:		0	
				Unfunded Actuarial Liability:		**8,756,112**	

RULES FOR ENDANGERED AND CRITICAL STATUS

Background

The Pension Protection Act of 2006 ("PPA"), enacted in August 2006, established special rules for plans in "Endangered" or "Critical" status. These rules become effective with the plan year beginning in 2008 and were originally scheduled to "sunset" in 2015.

The Multiemployer Pension Reform Act of 2014 ("MPRA"), enacted in December 2014, made the provisions contained in the PPA permanent. MPRA also made numerous changes to the PPA rules, including adding a new status for deeply troubled plans: Critical and Declining.

Informally, Critical Status is often referred to as "red zone" and Endangered Status as "yellow zone." A plan that is neither Critical nor Endangered is said to be "green zone."

Criteria for Endangered and Critical

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

Critical Status ("Red Zone")	*Endangered Status ("Yellow Zone")*
GETTING IN:	
Plan is Critical if it is described in one or more of the following: • Funded percentage is less than 65%, and, inability to pay nonforfeitable benefits and expenses for next 7 years, or • Projected funding deficiency (not recognizing extensions) in the current year or next 3 years (next 4 years if funded at less than 65%), or • (1) Contributions are less than current year costs (i.e. "normal cost") plus interest on any unfunded past liabilities, and, (2) value of vested benefits for non-actives is greater than for actives, and, (3) projected funding deficiency (not recognizing extensions) in the current year or next 4 years, or • Inability to pay all benefits and expenses for next 5 years.	Plan is Endangered if it is not Critical and it is described in one of the following: • Funded percentage is less than 80%, or • Projected funding deficiency in the current year or next 6 years. A non-critical plan that meets both of the preceding criteria is considered "Seriously Endangered" A plan that meets one of the two Endangered Status criteria above, but was not in Critical or Endangered for the preceding year, will remain not Critical or Endangered (i.e. it will be in "green zone") provided it is not projected to meet either of the two Endangered Status criteria as of the end of the 10th plan year following the certification year

RULES FOR ENDANGERED AND CRITICAL STATUS (CONT.)

Critical Status ("Red Zone")	*Endangered Status ("Yellow Zone")*
GETTING IN (cont.):	
A plan with a 5-year amortization extension under IRC Section 431(d) that previously emerged from Critical Status in PYB 2015 or later will re-enter Critical Status only if it is described in one of the following: • Projected funding deficiency in the current year or next 9 years (including amortization extensions), or, • Projected insolvency within the next 30 years	
GETTING OUT:	
Plan emerges from Critical Status when it meets all of the following: • No longer meets any of the Critical Status tests, and, • No projected funding deficiencies in the current year or next 9 years (including amortization extensions), and, • No projected insolvencies in the next 30 years A plan with a 5-year amortization extension under IRC Section 431(d) emerges from Critical Status when it meets all the following: • No projected funding deficiencies in the current year or next 9 years (including amortization extensions), and, • No projected insolvencies in the next 30 years	Plan emerges from Endangered Status when it no longer meets the requirements to be classified as Endangered or when it enters Critical Status

RULES FOR ENDANGERED AND CRITICAL STATUS (CONT.)

Restrictions for Endangered and Critical Plans

The Trustees of a plan that is in Endangered or Critical status face a number of restrictions in plan improvements that can be adopted and bargaining agreements that can be accepted.

Period	Endangered/Critical Restrictions
Date of first certification through adoption of funding improvement/rehabilitation plan ("plan adoption period")	• No reduction in level of contributions for any participants • No suspension of contributions • No exclusion of new or younger employees • No amendment that increases the liabilities of the plan by reason of any increase in benefits, change in accrual, or change in vesting unless required by law
After adoption of a funding improvement/rehabilitation plan until end of funding improvement/rehabilitation period	• Cannot be amended so as to be inconsistent with funding improvement/rehabilitation plan • No amendment that increases benefits, including future accruals, unless actuary certifies as being paid for with contributions not contemplated in funding improvement/ rehabilitation plan and still expected to meet applicable benchmark after considering the amendment

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

Critical and Declining Plans

Beginning in 2015, plans that are in Critical Status and are projecting insolvency within the next 15 years (20 years in some circumstances) are certified by the actuary as being in "Critical and Declining." These plans may have access to new tools that will allow them to reduce many previously-untouchable benefits, including benefits for participants in pay status. However, these expanded benefit reductions require government approval, must not be rejected by a majority of all participants through a vote, and are subject to a number of other requirements and limitations.

Selected Other MPRA Changes (effective with 2015 plan years)

- Plans projected to be Critical within the next 5 years can elect to be in Critical Status immediately
- New contribution rate increases required by a funding improvement or rehabilitation plan are not considered in calculating an employer's withdrawal liability or payment schedule
- If, upon the expiration of a collective bargaining agreement under a funding improvement or rehabilitation plan, bargaining parties do not adopt a new agreement consistent with an updated schedule, the Trustees must implement the update to the schedule previously adopted.

GLOSSARY OF COMMON PENSION TERMS

Benefits

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

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

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

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

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

Assets

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

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

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

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

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

GLOSSARY OF COMMON PENSION TERMS (CONT.)

Liabilities

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

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

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

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

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

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

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

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

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

GLOSSARY OF COMMON PENSION TERMS (CONT.)

Funding

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

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

Withdrawal Liability

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

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

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