



Industry & Local 338 Pension Plan Preliminary July 1, 2018 Actuarial Valuation & Projections

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Today's Discussion

- **Preliminary July 1, 2018 Actuarial Valuation**
 - Summary
 - Historical Information
 - Preliminary July 1, 2018 Valuation Results
 - Withdrawal Liability
- **Funding Projections**
- **Appendix**
 - Contribution Rate Summaries
 - Summary of Assumptions and Methods
 - Summary of Plan Provisions

July 1, 2018 Actuarial Valuation: Summary & Historical Information

Information presented in this report for plan years prior to 7/1/2015 is based on the prior actuary's reports.

Summary of Results

▪ Pension Protection Act of 2006

- The Plan was certified in Critical Status (“Red Zone”) for the July 1, 2018 Plan Year.
 - This is the second Plan Year that the Plan has been in Critical Status

▪ Funded Percentage (Unit Credit Liability)

- As of July 1, 2018, the Plan is 90.5% funded using the Actuarial Value of Assets and 89.4% funded based on the Market Value of Assets.
- As of July 1, 2017, the Plan was 82.0% funded using the Actuarial Value of Assets and 79.2% funded based on the Market Value of Assets.

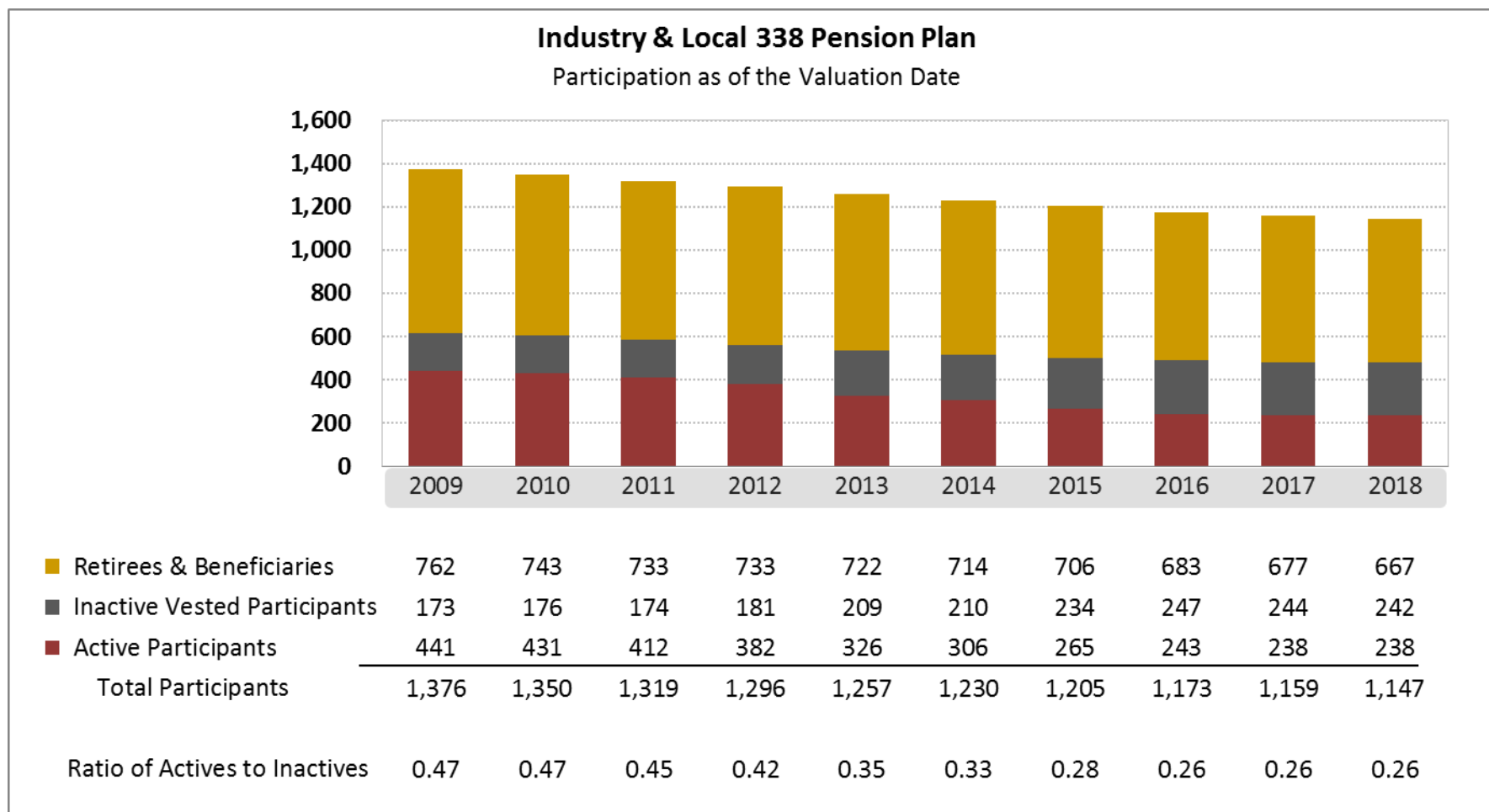
▪ Minimum Funding Requirements

- Funding Standard Account balance is positive and is now projected to remain positive under a projection of the Plan’s funded status using:
 - Valuation assumptions, including 7.50% return on investments in all future years
 - Current Plan provisions
 - Contribution rates included in current Collective Bargaining Agreements (CBAs)
 - All current employers remain in the Plan

▪ Withdrawal Liability

- The Plan has unfunded vested benefits as of June 30, 2018 (based on Market Value of Assets).
- All employer withdrawals should be reviewed to determine if withdrawal liability should be assessed.

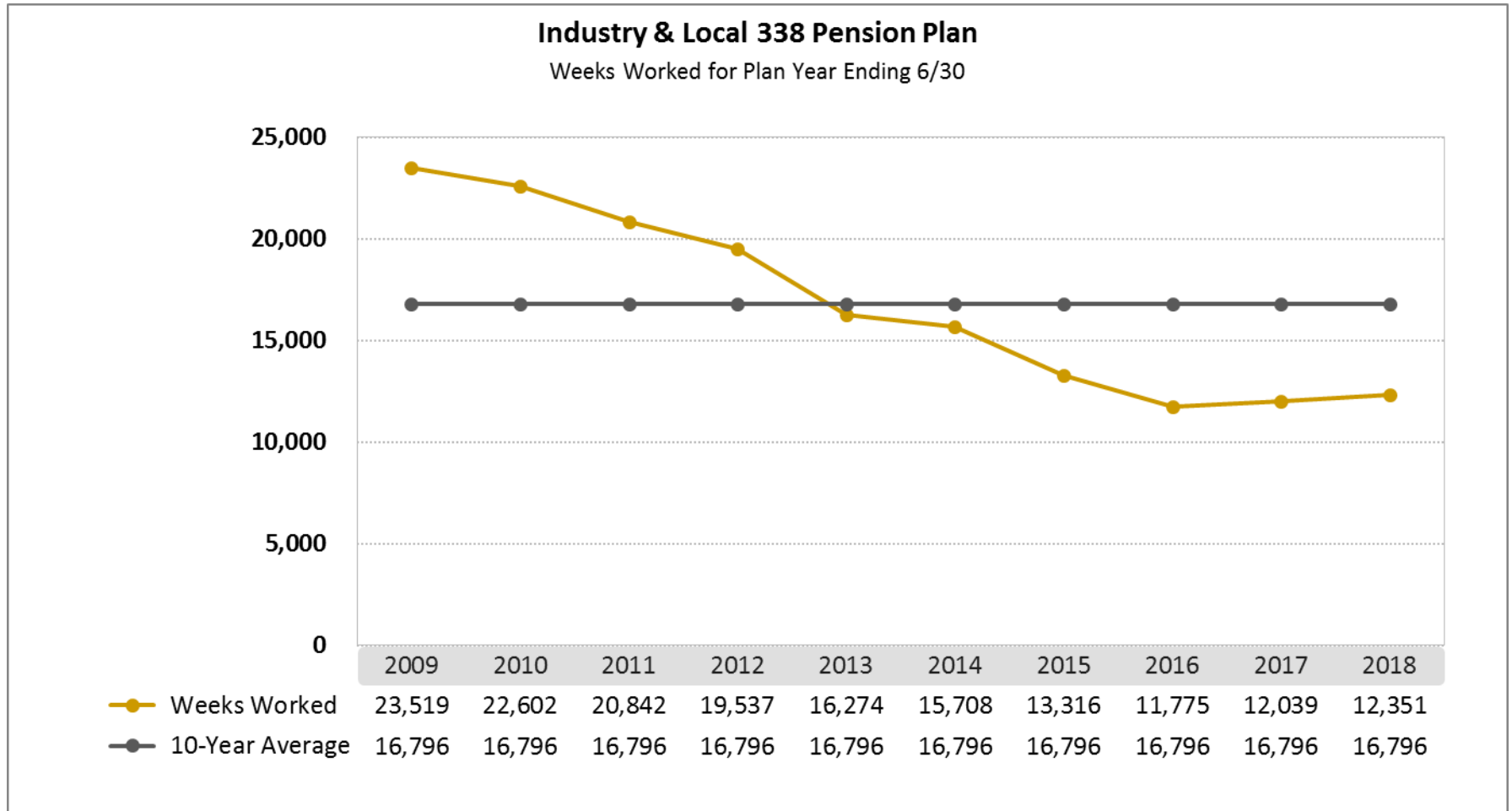
Participation



Notes

- 1) All participants of Crowley Foods (Binghamton) were considered Inactive as of July 1, 2015.
- 2) Retiree and Beneficiary counts above exclude Alternate Payees awarded plan benefits under a QDRO.

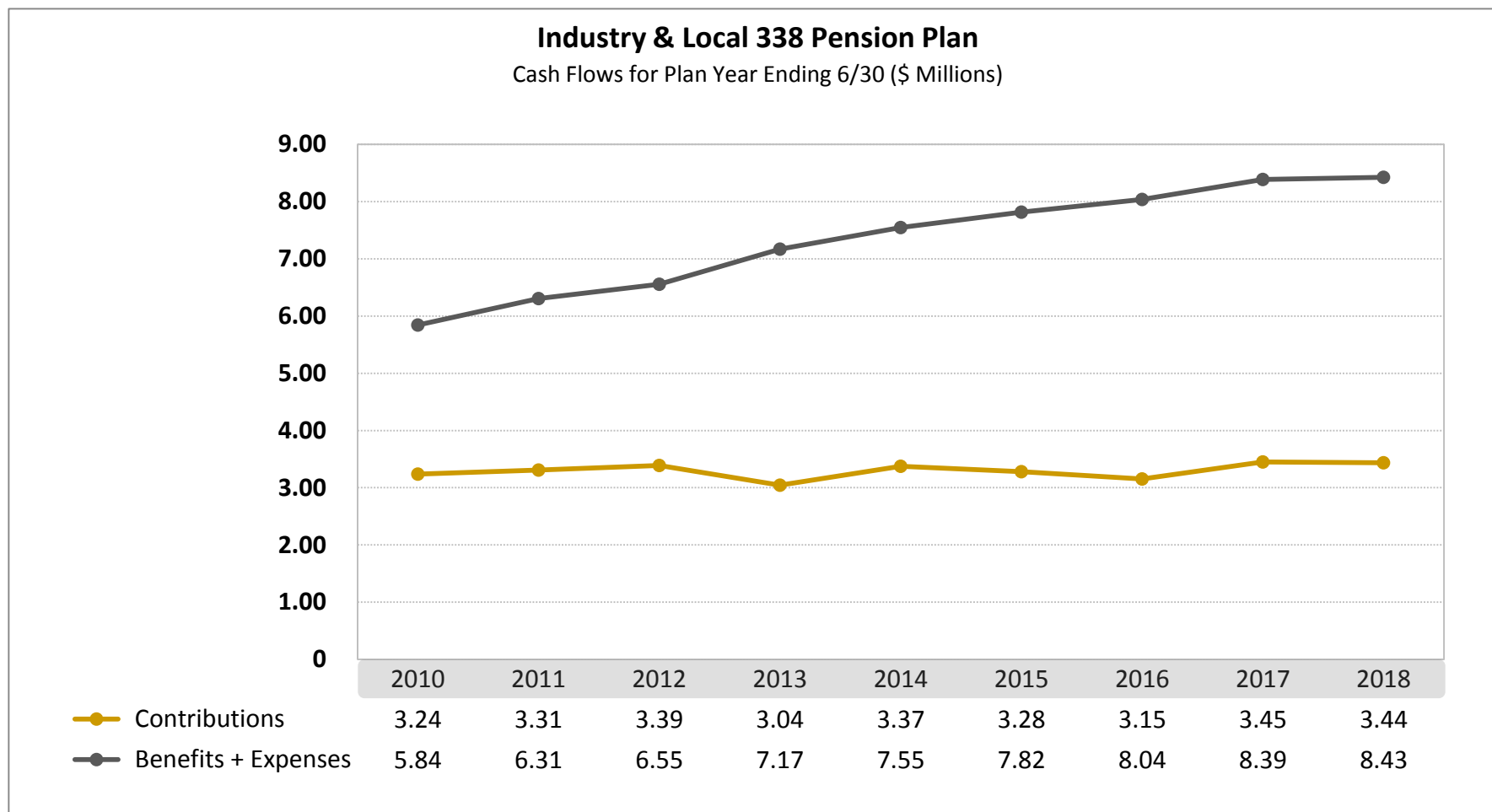
Weeks Worked



Notes

- 1) The 10-year Average shown for all years represents the annual average for the 10 plan years ending June 30, 2018.

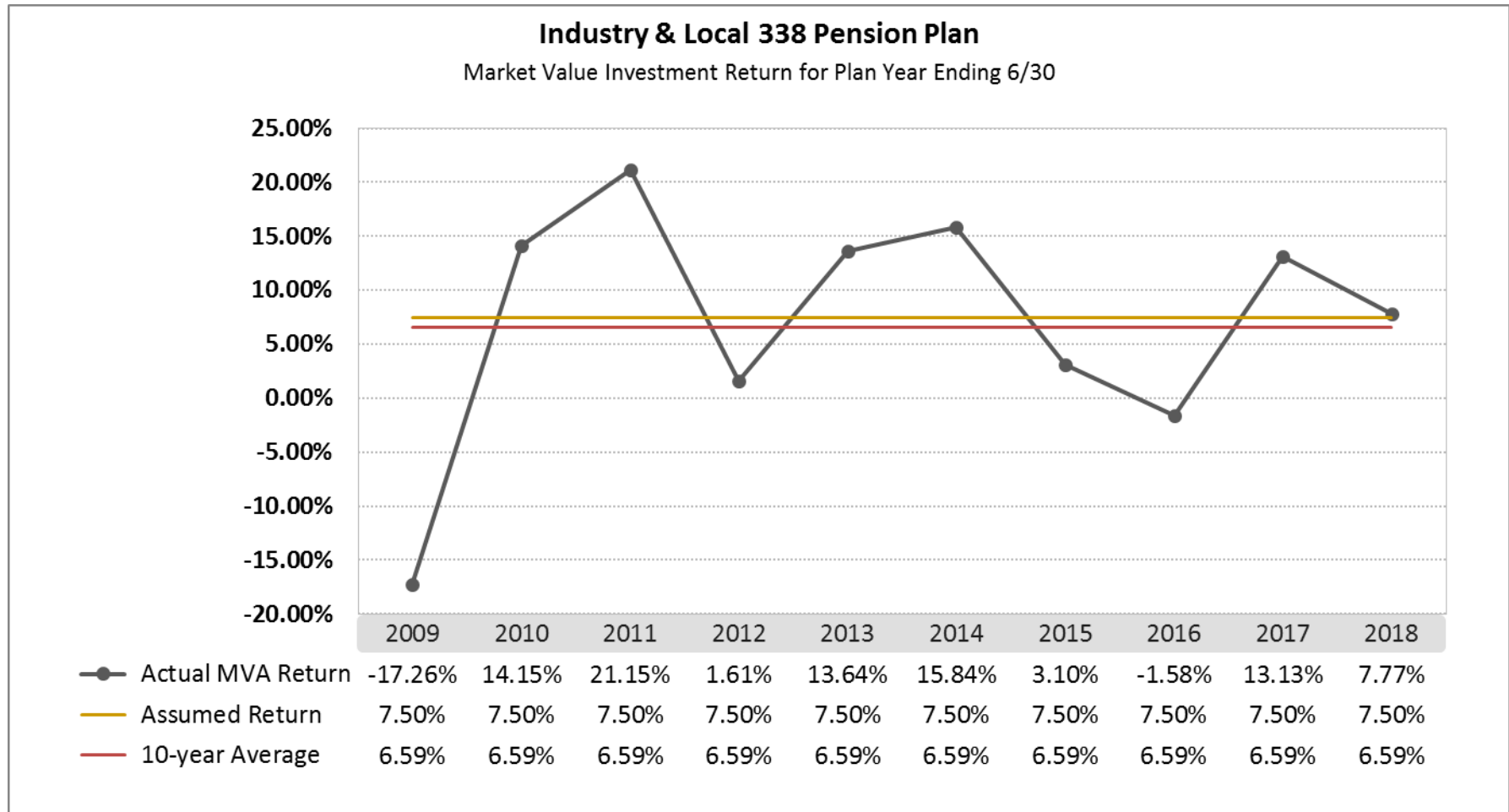
Cash Flows



Notes

- 1) Contributions include withdrawal liability payments.

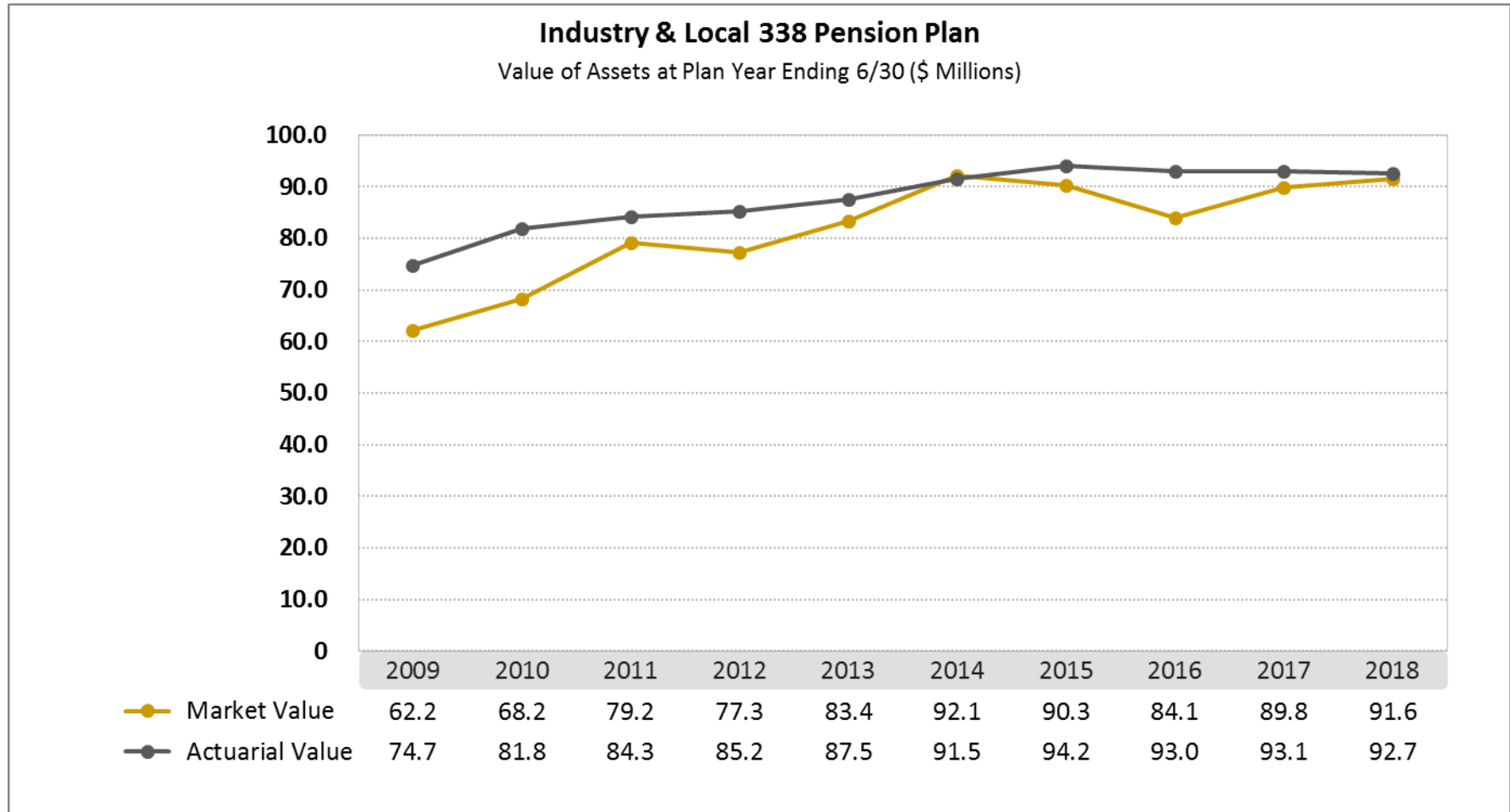
Investment Returns



Notes

- 1) The 10-year Average (6.59%) shown for all years represents the annual average geometric return for the 10 plan years ending June 30, 2018.

Value of Assets



Notes

- 1) Market values include receivable contributions.
- 2) Market values exclude receivable withdrawal liability payments.

July 1, 2018 Actuarial Valuation: Preliminary Results

Purpose of the Valuation

- **Determine**

- Whether negotiated contributions adequately fund benefits
- The minimum required and maximum deductible contributions for the plan year
- The unfunded vested liability for computation of withdrawal liability
- The contribution margin for the plan year
- The benefit liabilities for the next status certification under PPA
- The benefit liabilities and assets are the basis of any benefit or contribution study

- **Review & Establish**

- Actuarial assumptions in view of recent experience
- Basis for developing or updating a funding improvement plan or rehabilitation plan

Summary of Preliminary Valuation Results

■ Active Experience

- Number of actives stayed level at 238 as of July 1, 2017 and July 1, 2018.
- Participants classified as active for the July 1, 2018 valuation worked 11,351 total weeks in the plan year ending June 30, 2018.

■ Market Value of Assets

- At \$6.8 million, the net investment return for the plan year ending June 30, 2018 was 7.77% (0.27% more than the 7.50% assumed return).
- This resulted in a market value gain from investments of approximately \$236,616, relative to the 7.50% assumption.

■ Liability Gain

- Approximately \$26,000 or about 0.03% of total plan liabilities.
 - This gain is within a reasonable range.
- We will continue to monitor the assumptions to make sure they are reasonable both in the aggregate and on an individual basis.

Issues Impacting Current Valuation Results

■ Plan Changes

- Rehabilitation Plan, effective January 1, 2018, is first reflected in this July 1, 2018 valuation.
 - Eliminate Adjustable Benefits - Accrued (and Future) Benefits
 - Ancillary Benefits
 - Death Benefit for Single Participants
 - Disability
 - Normal Form of Payment
 - Single Participants: 120 Payments Guaranteed
 - Married Participants: 75% Joint and Survivor (with 120 Payments Guaranteed)
 - Early Retirement Subsidies
 - Age 55 and 15 Years of Service
 - Service Pension: 20, 25, 30, 35 Years
- The benefit changes made by the Rehabilitation Plan resulted in a decrease of \$12,474,177 in the Plan's accrued liability and a decrease of \$415,102 in the Plan's Normal Cost measured at July 1, 2018.

Issues Impacting Current Valuation Results

- **Assumption Changes**

- No changes from the previous valuation

- **Funding Relief**

- Trustees elected to apply Funding Relief to the Plan & 2008 net investment losses are
 - Phased into the actuarial value of assets over 10 years beginning with the July 1, 2009 determination. Fully recognized at July 1, 2018
 - Eligible net investment losses are amortized over 29 years in the funding standard account (last base recognized in the July 1, 2014 actuarial valuation)

Issues Impacting Current Valuation Results

■ Contribution Income

- Expected \$3.06 million in contributions, financial statements show \$3.44 million received (including withdrawal liability payments)
- Total weeks worked equaled 12,351 during the plan year ending June 30, 2018
 - 11,351 weeks for participants classified as active for the July 1, 2018 valuation
 - 1,000 weeks for other participants
- The average contribution rate for the Plan remained level at roughly \$268/week for the plan year ending June 30, 2018. The average contribution rate was roughly \$267/week for the plan year ending June 30, 2017.

Participant Reconciliation

Reconciliation of Participants by Status						
	Active	Inactive Vested	Non-Disabled Retirees	Disabled Retirees	Beneficiaries	Total
A. Count as of July 1, 2017	238	244	546	24	107	1,159
B. Status Changes During Plan Year						
1. Nonvested Terminations	(9)					(9)
2. Vested Terminations	(11)	11				0
3. Retirement	(7)	(6)	13			0
4. Disabled		(2)		2		0
5. Deceased	(1)	(3)	(32)		(4)	(40)
6. Certain Period Ended					(2)	(2)
7. Lump Sum						0
8. Rehires	2	(2)				0
9. New Entrants	26					26
10. New Beneficiaries					13	13
11. Net Adjustments			3	(2)	(1)	0
Net Increase (Decrease)	0	(2)	(16)	0	6	(12)
C. Count as of July 1, 2018	238	242	530	24	113	1,147

Notes

1) Counts exclude 9 Alternate Payees as July 1, 2018 and 9 Alternate Payees as of July 1, 2017.

Age & Service Distribution

Age & Service Distribution for Active Participants											
Age	Years of Service										Total
	Under 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 +	
Under 25	-	8	-	-	-	-	-	-	-	-	8
25 - 29	-	14	3	1	-	-	-	-	-	-	18
30 - 34	-	10	9	6	2	-	-	-	-	-	27
35 - 39	-	7	3	14	4	-	-	-	-	-	28
40 - 44	-	5	6	4	9	2	-	-	-	-	26
45 - 49	-	7	2	8	5	4	-	-	-	-	26
50 - 54	-	5	10	8	9	4	2	2	-	-	40
55 - 59	-	6	1	7	4	6	2	2	1	-	29
60 - 64	-	1	4	9	-	6	2	2	3	3	30
65 - 69	-	1	-	1	-	1	2	-	-	-	5
70 +	-	-	1	-	-	-	-	-	-	-	1
Total	-	64	39	58	33	23	8	6	4	3	238

Notes

- 1) Participants with less than one year of service are excluded for valuation purposes.

Participant Demographic Summary

Measurement Date	July 1, 2018		July 1, 2017	
A. Active Participants				
1. Count		238		238
2. Average Age		46.3		46.5
3. Average Credited Service		12.0		12.4
4. Average Prior Year Weeks		47.7		49.3
5. Average Monthly Accrued Benefit	\$	1,366	\$	1,382
B. Inactive Vested Participants				
1. Count		242		244
2. Average Age		51.4		50.8
5. Average Monthly Accrued Benefit	\$	1,008	\$	1,027
C. Retired Participants and Beneficiaries				
1. Count		667		677
2. Average Age		73.9		73.8
3. Average Monthly Benefit	\$	1,002	\$	969

Notes

1) Retiree and Beneficiary counts above exclude Alternate Payees awarded plan benefits under a QDRO.

Summary of Key Results

Measurement Date	July 1, 2018	July 1, 2018 (Pre-Plan Changes)	July 1, 2017
A. Normal Cost			
1. Cost of Benefit Accruals	\$ 934,349	\$ 1,349,451	\$ 1,262,757
2. Assumed Operating Expenses	360,672	360,672	360,672
3. Total	\$ 1,295,021	\$ 1,710,123	\$ 1,623,429
B. Actuarial Accrued Liability			
1. Active Participants	\$ 14,874,320	\$ 23,259,052	\$ 23,134,699
2. Inactive Vested Participants	10,677,729	14,767,174	14,899,096
3. Retired Participants and Beneficiaries	76,840,869	76,840,869	75,353,839
4. Total	\$ 102,392,918	\$ 114,867,095	\$ 113,387,634
C. Assets			
1. Market Value of Assets	\$ 91,628,548	\$ 91,628,548	\$ 89,833,306
Prior Year Net Investment Return	7.8%	7.8%	13.1%
2. Actuarial Value of Assets	\$ 92,666,162	\$ 92,666,162	\$ 93,057,325
Prior Year Net Investment Return	5.1%	5.1%	5.6%
D. Funded Percentages			
1. Market Value Funded Percentage (C.1. / B.4.)	89.4%	79.7%	79.2%
2. Actuarial Value Funded Percentage (C.2. / B.4.)	90.5%	80.6%	82.0%

Notes

1) All results based on valuation interest rate of 7.50%.

Contribution Margin

Measurement Date	July 1, 2018		July 1, 2017		July 1, 2016
A. Unfunded Actuarial Accrued Liability					
1. Actuarial Accrued Liability	\$ 102,392,918		\$ 113,387,634		\$ 110,902,539
2. Actuarial Value of Assets	92,666,162		93,057,325		92,953,479
3. Unfunded Liability	\$ 9,726,756		\$ 20,330,309		\$ 17,949,060
B. Actuarial Cost					
1. Normal Cost		Per Week		Per Week	
a. Cost of Benefit Accruals	\$ 971,467	\$ 83.03	\$ 1,312,921	\$ 112.22	\$ 1,215,515
b. Assumed Operating Expenses	375,000	32.05	375,000	32.05	375,000
c. Total	\$ 1,346,467	115.08	\$ 1,687,921	144.27	\$ 1,590,515
2. Unfunded Liability Amortization Payment	3,617,572	309.19	5,870,795	501.78	4,290,803
3. Total Actuarial Cost for Plan Year	\$ 4,964,039	424.28	\$ 7,558,716	646.04	\$ 5,881,318
Amortization Period	3		4		5
C. Expected Employer Contributions					
1. Expected Weeks	11,700		11,700		11,500
2. Average Contribution Rate per Week	\$ 274.36		\$ 261.13		\$ 249.53
3. Expected Contributions	\$ 3,210,012		\$ 3,055,221		\$ 2,869,623
Unfunded Amortization Contribution		\$ 1,863,545		\$ 1,367,300	
Unfunded Amortization Period (years)		6.26		Perpetuity	\$ 1,279,108
					53.43
D. Contribution Margin					
1. Contribution Margin for Plan Year	\$ (1,754,027)		\$ (4,503,495)		\$ (3,011,695)
2. Contribution Margin per Week	\$ (149.92)		\$ (384.91)		\$ (261.89)

Notes

- 1) All results based on valuation interest rate of 7.50%.
- 2) The actuarial costs in B. above include an include interest adjustments to reflect payments throughout the year.

Employer Withdrawal Liability

- **Liabilities are determined using a blend of the valuation interest rate and PBGC Termination rates**
- **Unfunded Vested Benefits (UVBs) are allocated using the “Rolling Five” Method**
 - A single pool of UVBs determined at the end of the plan year prior to the employer’s withdrawal
 - UVBs are allocated based on the ratio of:
 - Total contributions made by the employer over the five plan years ending in the plan year prior to withdrawal
 - to
 - Total contributions made by all employers over the five plan years ending in the plan year prior to withdrawal, adjusted for previously withdrawn employers.

Withdrawal Liability:

Treatment of Reductions in Adjustable Benefits

- **Industry & Local 338 has reduced Adjustable Benefits once**
 - Effective 1/1/2018, eliminated:
 - Death and Disability benefits not required by law
 - Form of payment subsidies
 - Retirement subsidies
- **Pension Protection Act provides that any reductions in Adjustable Benefits must be disregarded in determining a plan's unfunded vested benefits for withdrawal liability**
 - Direct calculation
 - Administratively complex; not commonly used
 - Requires valuation of at least two benefits for each participant
 - PBGC Technical Notice 10-3: Simplified Method
 - Establishes a UVB pool equal to the value of Adjustable Benefits
 - The pool is amortized over 15 years using the valuation interest rate
 - Allocated to withdrawing employer using the contribution fraction at date of withdrawal

PBGC 10-3 Simplified Method: Summary

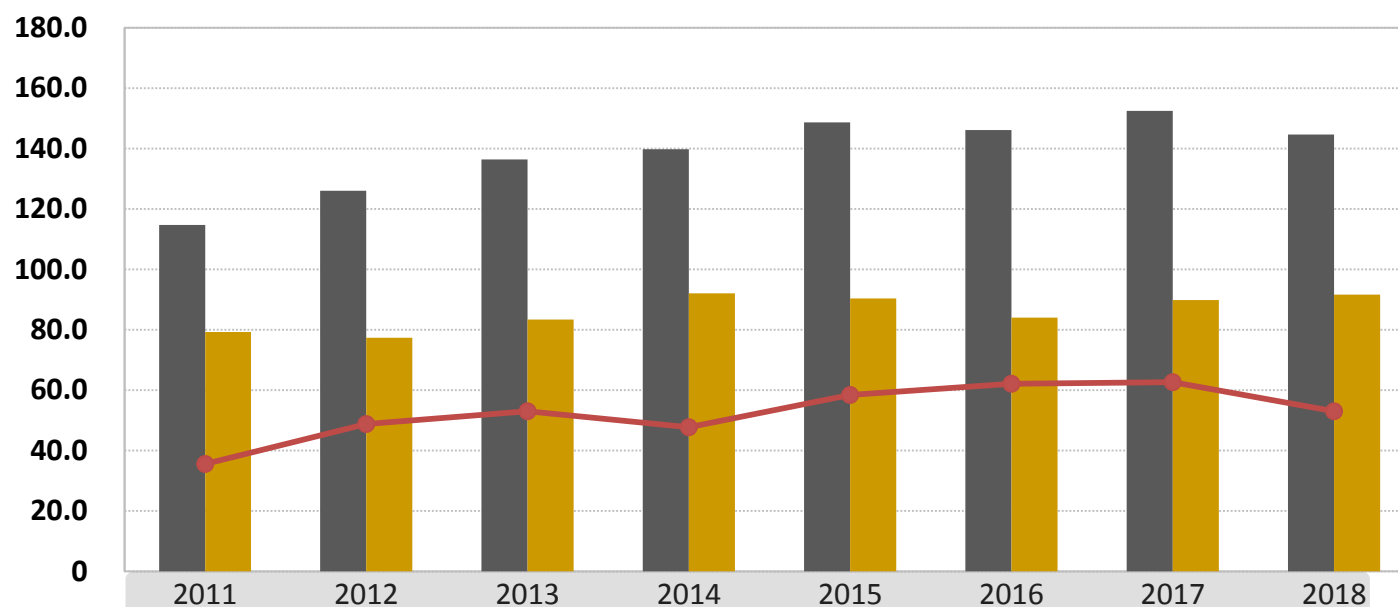
- Estimated Employer Withdrawal in 7/1/2018 – 6/30/2019 Plan Year

Withdrawal Liability	Estimated Value as of 6/30/2018	Contribution Period
Unfunded Vested Benefit (UVB) Pool:		
UVB at 6/30/2018, net of collectible EWL	\$53,033,000	7/1/2013 – 6/30/2018
Affected Benefit Pools:		
Reduced Adjustable Benefits as of 6/30/2018	\$13,107,000	7/1/2013 – 6/30/2018
Total UVB to Allocate:	\$66,140,000	

Withdrawal Liability

Industry & Local 338 Pension Plan

Withdrawal Liability at Plan Year Ending 6/30 (\$ Millions)



■ Vested Benefits	114.7	126.0	136.4	139.8	148.7	146.2	152.5	144.7
■ Market Value of Assets	79.2	77.3	83.4	92.1	90.3	84.1	89.8	91.6
● Unfunded Vested Benefits	35.5	48.7	53.0	47.7	58.4	62.1	62.6	53.0

Notes

- 1) The value of vested benefits is determined using a blend of the valuation interest rate and PBGC termination rates
- 2) Vested Benefits as of 6/30/2018 reflects reductions in adjustable benefits required by the Rehabilitation Plan that must be disregarded for withdrawal liability purposes. The value of adjustable benefits is \$13.1 million as of 6/30/2018.

Funding Projections

Projection Assumptions and Methods

- **Unless otherwise stated, the projection assumptions, methods, data and plan provisions used are the same as those used for the July 1, 2018 actuarial valuation.**
 - Benefit changes made by the Rehabilitation Plan are first reflected in the July 1, 2018 valuation.
 - No assumption changes to account for possible changes to participant behavior due to benefit changes.
 - No changes to valuation methods / no amortization extensions.
 - No future expected gains or losses other than those attributable to investment returns, as applicable.
- **Rehabilitation Period:**
 - 7/1/2020 – 6/30/2030
- **Investment Earnings**
 - 7.77 % return on assets for the plan year ending June 30, 2018
 - 7.50% per year, net of investment-related expenses, thereafter

Other assumptions may be reasonable and could produce different results. Other risks can negatively impact the funded status of the plan such as participants living longer than assumed. Additional scenarios available upon request.

Projection Assumptions and Methods (cont.)

- **Work Levels (each plan year beginning July 1, 2018)**
 - No employer withdrawals: 11,700 total weeks
 - College of New Rochelle & Culinarth withdrawals: 9,800 total weeks
- **Contribution Rates (No Employer Withdrawals)**
 - 41% of hours worked under contracts that are expected to renew in PYB 2018
 - College of New Rochelle, Westchester Local 860, Friesland, & Culinarth
 - 12% of hours worked under contracts beginning that are expected to renew in PYB 2019
 - LP Transport
 - 47% of hours worked under contracts beginning that are expected to renew in PYB 2020
 - HP Hood / Crowley, Montefiore New Rochelle, Paraco
- **All contributions rate increases are benefit-bearing.**
- **Operating Expenses**
 - \$375,000 for the plan year beginning July 1, 2018, increasing 3.0% per year

Other assumptions may be reasonable and could produce different results. Other risks can negatively impact the funded status of the plan such as participants living longer than assumed. Additional scenarios available upon request.

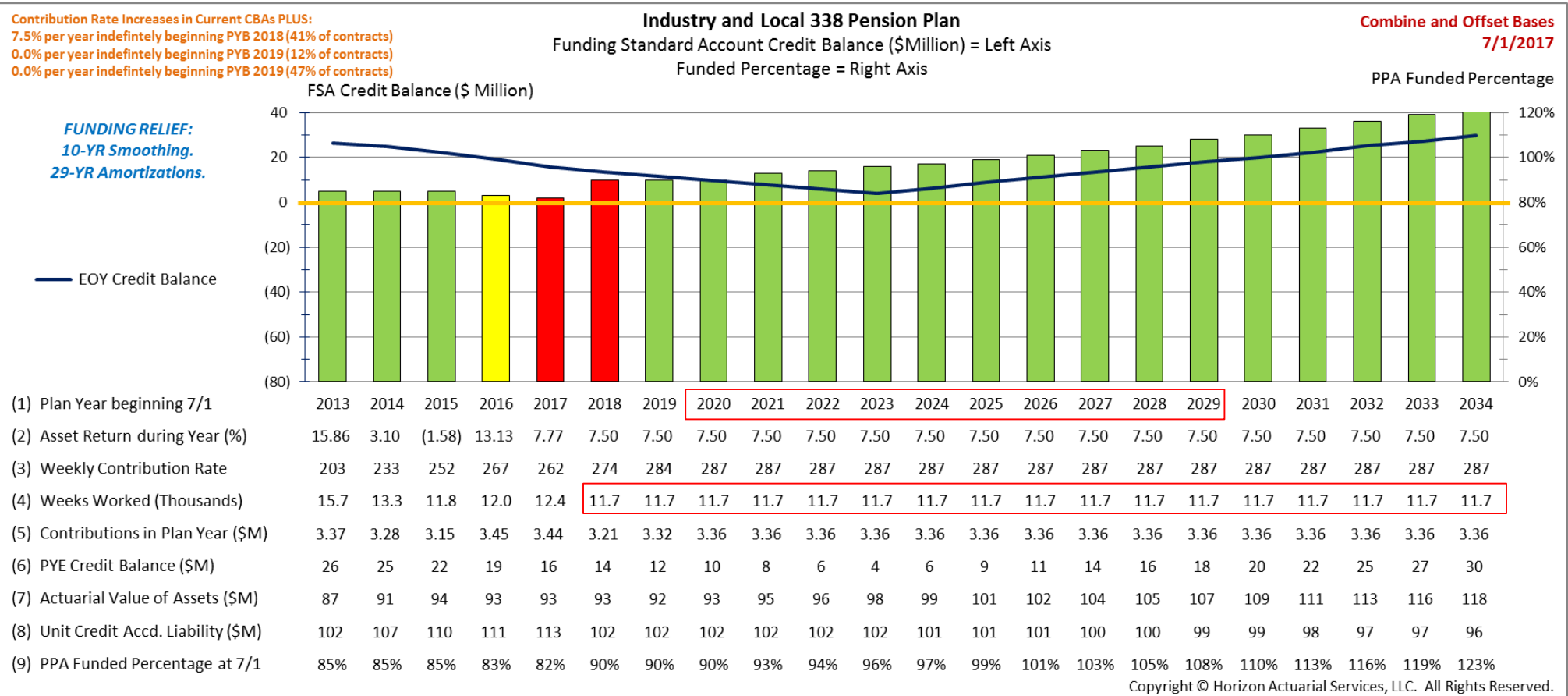
Projection Roadmap – No Additional Rate Increases

Scenario	Investment Return	Weeks Worked	RP Requires Emergence 7/1/2030			
	PYE 2019 / PYE 2020+	Each year PYE 2019+	Emerge	EOY FSA Balance	% Funded 7/1/2030	Weekly Contrib Rate 7/1/2030
1 Baseline No Withdrawals	7.50% / 7.50%	11,700	Yes	\$18M	110%	\$287
1A Low ROA PYE 2019+	0.00% / 7.50%	11,700	Yes	\$7M	95%	\$287
1B Low ROA 2019-2029	6.00% / 6.00% 7.50% 2029+	11,700	Yes	\$8M	89%	\$287
College / Culinary Withdraw						
2 Baseline College/Culinary Withdrawals	7.50% / 7.50%	9,800	Yes	\$13M	96%	\$299
2A Low ROA PYE 2019+	0.00% / 7.50%	9,800	No	\$2M	90%	\$299
2B Low ROA 2019-2029	6.00% / 6.00% 7.50% 2029+	9,800	No	\$3M	84%	\$299

Other assumptions may be reasonable and could produce different results. Other risks can negatively impact the funded status of the plan such as participants living longer than assumed. Additional scenarios available upon request.

Scenario 1: All Employers Continue

Eliminates All Adjustable Benefits | 7.50% Return PYB 2018+ | 11.7 Thousand Weeks Worked beginning PYB 2018 |
Current CBA Contribution Increases only



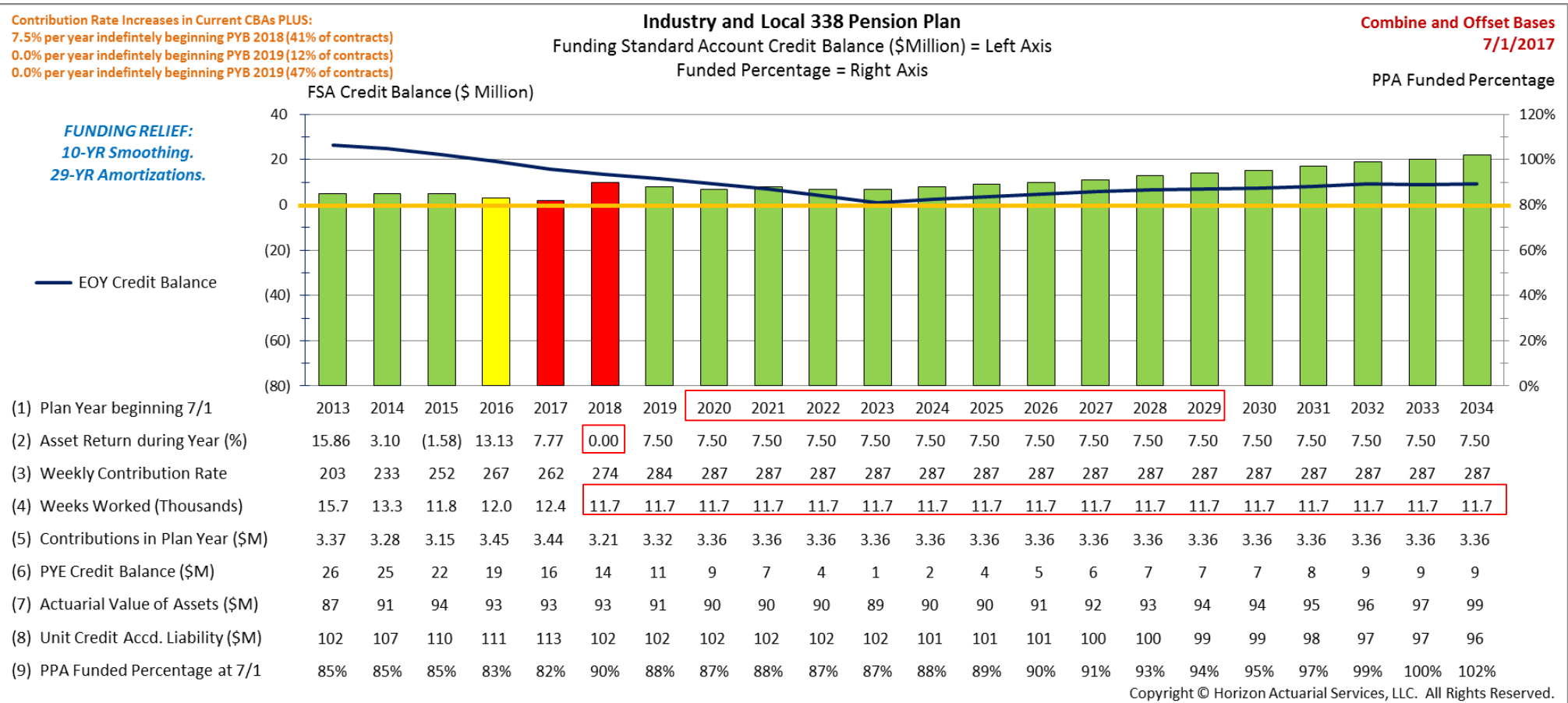
Notes

- 1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. See graph for detail regarding assumed rate increases.
- 2) Benefit changes made by the RP are reflected beginning in the July 1, 2018 plan year.

Scenario 1A: All Employers Continue, Low 2019 ROA

Eliminates All Adjustable Benefits | **0.00% Return PYB 2018; 7.50% Return PYB 2019+** |

11.7 Thousand Weeks Worked beginning PYB 2018 | Current CBA Contribution Increases only

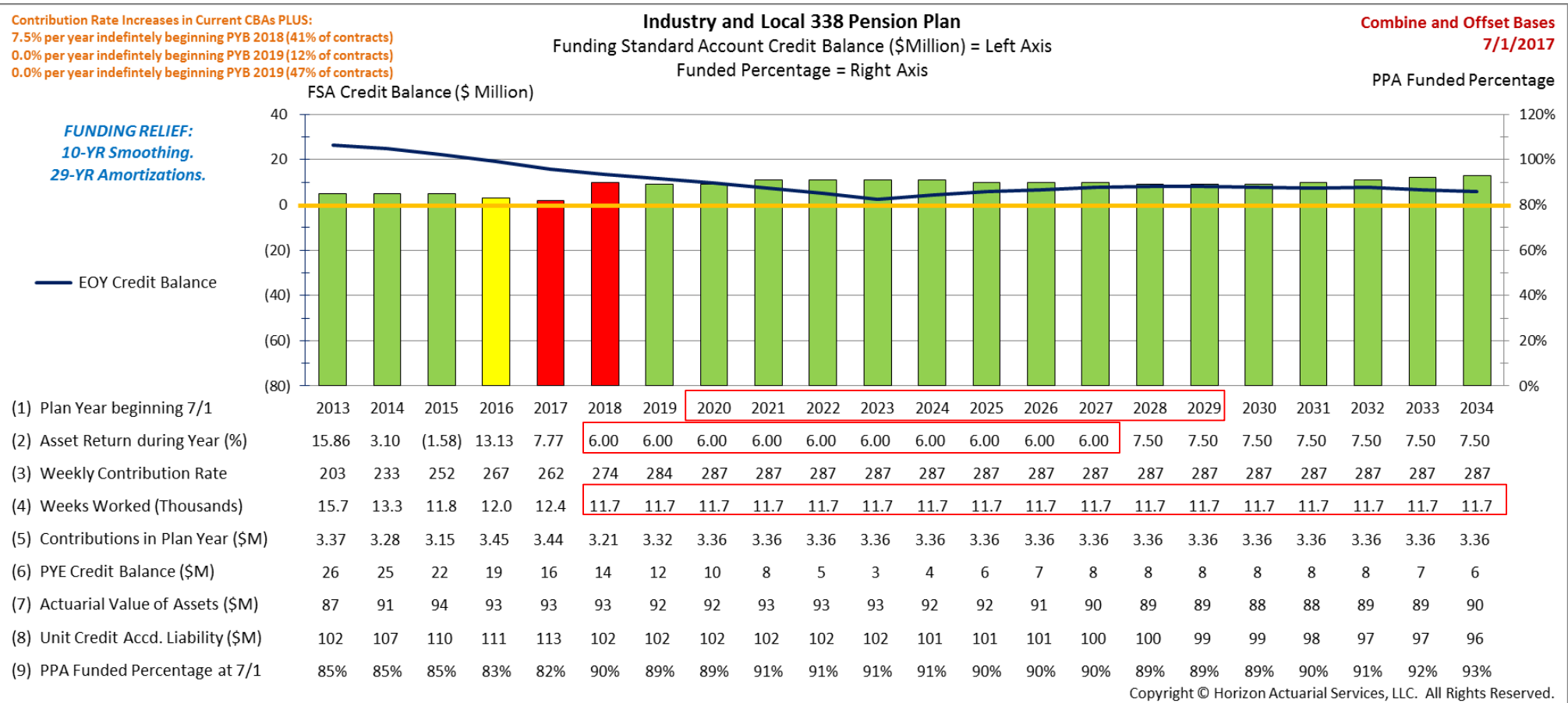


Notes

- 1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. See graph for detail regarding assumed rate increases.
- 2) Benefit changes made by the RP are reflected beginning in the July 1, 2018 plan year.

Scenario 1B: All Employers Continue, Low ROA 2019-2029

Eliminates All Adjustable Benefits | **6.00% Return 7/2019 – 6/2029; 7.50% Return PYB 2029+ |**
 11.7 Thousand Weeks Worked beginning PYB 2018 | Current CBA Contribution Increases only

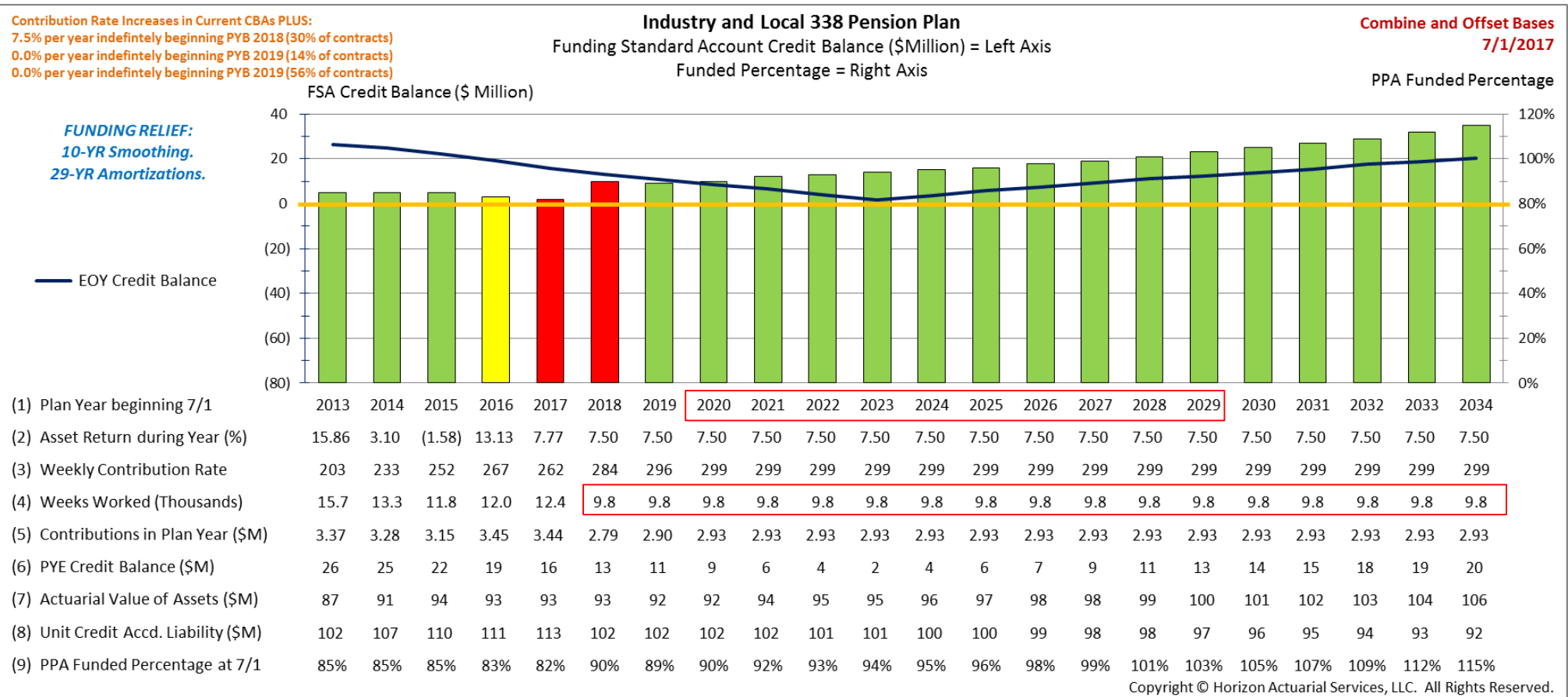


Notes

- Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. See graph for detail regarding assumed rate increases.
- Benefit changes made by the RP are reflected beginning in the July 1, 2018 plan year.

Scenario 2: Two Employers Withdraw

Eliminates All Adjustable Benefits | 7.50% Return PYB 2017+ | **9.8 Thousand Weeks Worked beginning PYB 2018** |
Current CBA Contribution Increases only



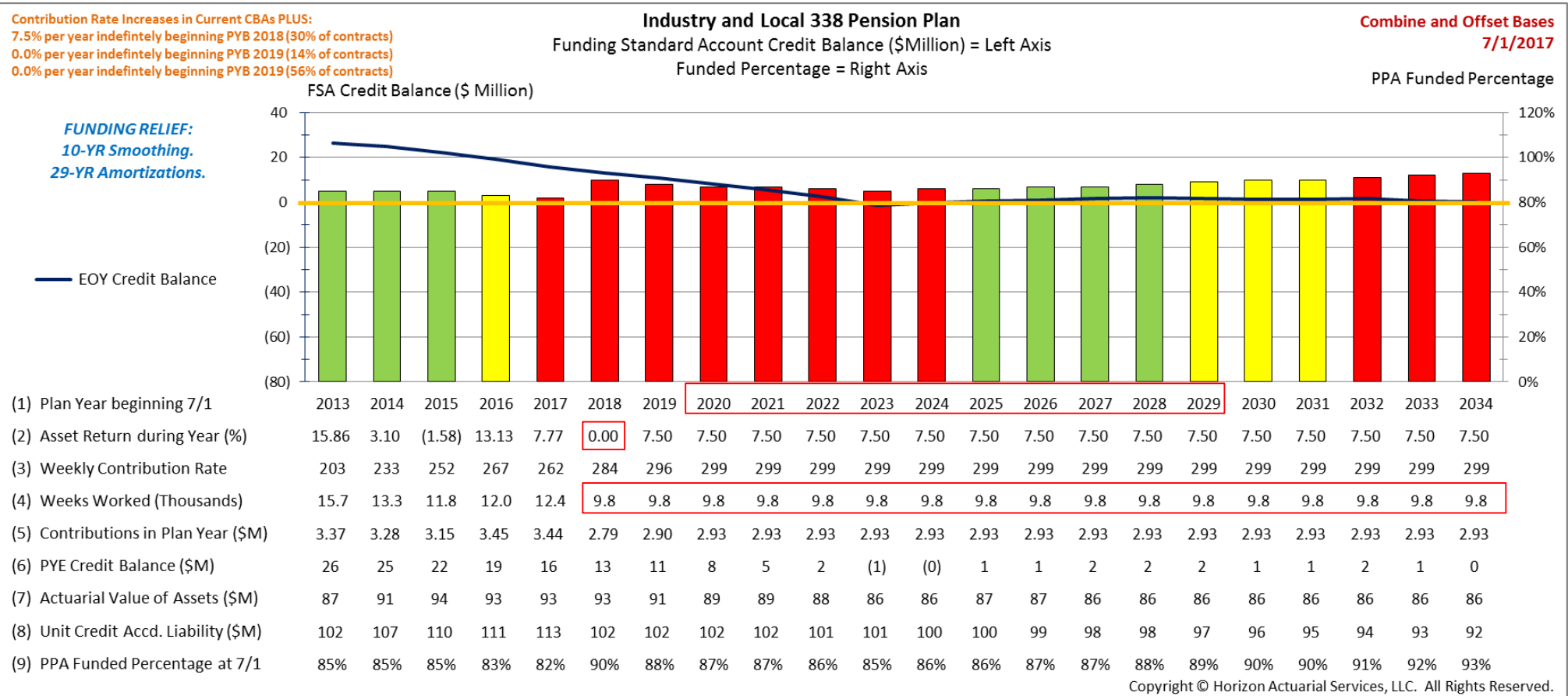
Notes

- Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. See graph for detail regarding assumed rate increases.
- Benefit changes made by the RP are reflected beginning in the July 1, 2018 plan year.

Scenario 2A: Two Employers Withdraw, Low 2019 ROA

Eliminates All Adjustable Benefits | **0.00% Return PYB 2018; 7.50% Return PYB 2019+** |

9.8 Thousand Weeks Worked beginning PYB 2018 | Current CBA Contribution Increases only

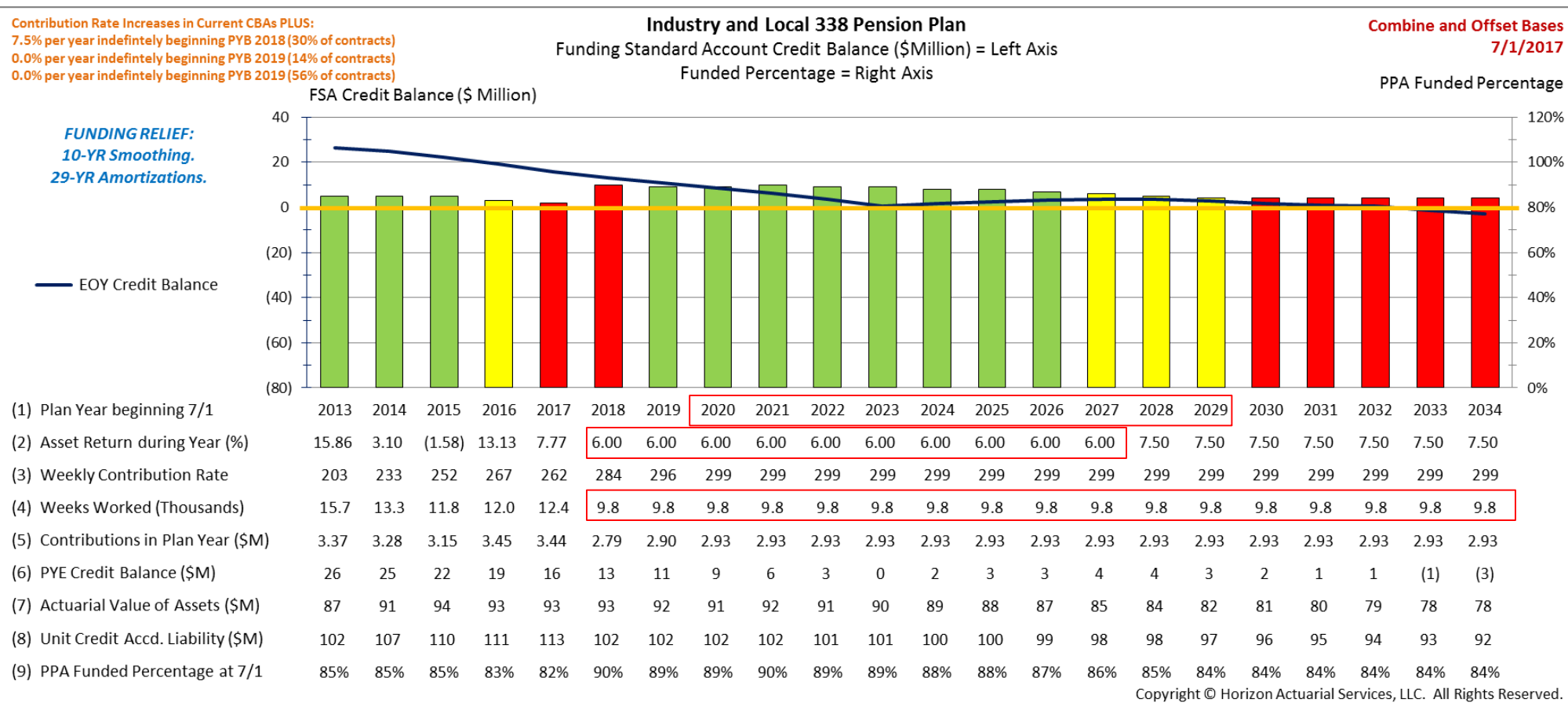


Notes

- 1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. See graph for detail regarding assumed rate increases.
- 2) Benefit changes made by the RP are reflected beginning in the July 1, 2018 plan year.

Scenario 2B: Two Employers Withdraw, Low ROA 2019-2029

Eliminates All Adjustable Benefits | **6.00% Return 7/2019 – 6/2029; 7.50% Return PYB 2029+ |**
 9.8 Thousand Weeks Worked beginning PYB 2018 | Current CBA Contribution Increases only



Notes

- Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. See graph for detail regarding assumed rate increases.
- Benefit changes made by the RP are reflected beginning in the July 1, 2018 plan year.

Observations

- **Favorable experience and conservative design of the Rehabilitation Plan have resulted in an improved projected funded status for the Plan**
 - Assuming valuation assumptions are met and active work remaining level from 7/1/2018, the Plan is projected to emerge from critical status before the end of the Rehabilitation Period in most scenarios modeled
- **The Plan remains sensitive to both investment return and contribution levels**
 - Long term funding improvement is compromised if investment returns are less than assumed or contribution levels fall
 - Contribution rate increases like those anticipated by the Rehabilitation Plan may be required to keep the Plan well funded in the long term.

Appendix

Contribution Rate Summary

Employer	Contract Expiration Date	As of 7/1/2016		As of 7/1/2017		As of 7/1/2018	
		Active Count (Valn Data)	Total Wkly Contrib Rate	Active Count (Valn Data)	Total Wkly Contrib Rate	Active Count (Valn Data)	Total Wkly Contrib Rate
College of New Rochelle	8/31/2013	13	\$ 174.00	20	\$ 174.00	17	\$ 208.95
Crowley LaFargeville	10/31/2020	100	272.79	96	286.43	92	286.43
Culinart	12/31/2016	19	226.91	21	226.91	20	267.15
Freisland Campina	12/31/2018	63	205.09	56	215.09	59	247.60
LP Transport	8/15/2019	27	276.80	25	290.80	29	322.75
Montefiore New Rochelle	11/5/2020	12	234.06	12	234.06	12	251.61
Paraco Gas	1/31/2021	8	227.60	7	227.60	8	245.15
Westchester L860	9/30/2013	1	205.21	1	205.21	1	243.28
Total		243		238		238	

Notes

- 1) All contributions are benefit-bearing, effective beginning July 1, 2016.
- 2) Contribution rates shown above are as reported by Plan Administrator.
- 3) Contribution rates as of 7/1/2018 include surcharges for College of New Rochelle, Culinart, Friesland Campina, Westchester L 860

Historical Contribution Rates by Contract

Employer	Base Rate	As of Plan Year Ending								
		2010	2011	2012	2013	2014	2015	2016	2017	2018
College of New Rochelle	\$ 110.44	\$ 130.40	\$ 143.60	\$ 158.00	\$ 174.00	\$ 174.00	\$ 174.00	\$ 174.00	\$ 174.00	\$ 208.95
Crowley LaFargeville	130.00	154.00	169.00	186.34	204.97	225.47	248.00	272.79	286.43	286.43
Culinart	108.44	128.08	141.08	154.98	170.48	187.53	206.28	226.91	226.91	267.15
Freisland Campina	100.12	121.13	133.25	146.57	161.23	177.35	195.09	205.09	215.09	247.60
LP Transport	160.00	160.00	176.00	192.00	208.00	228.80	251.60	276.80	290.80	322.75
Montefiore New Rochelle	120.12	145.33	159.86	175.85	193.44	212.78	234.06	234.06	234.06	251.61
Paraco Gas	124.00	140.00	148.00	156.00	172.00	188.00	206.80	227.60	227.60	245.15
Westchester L860	130.15	154.17	169.59	186.55	205.21	205.21	205.21	205.21	205.21	243.28

Notes

- 1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.
- 2) Contribution rates for 2018 include surcharges for College of New Rochelle, Culinart, Friesland Campina, Westchester L 860

Summary of Assumptions and Methods

Assumption or Method	Description of Assumption or Method
Interest Rate	7.50% per annum.
Plan Year	The twelve-month period beginning July 1 and ending June 30.
Mortality	Non-Disabled: Non-annuitant: 125% of the sex-distinct RP-2014 Blue Collar Employee Mortality Table Annuitant: 125% of the sex-distinct RP-2014 Blue Collar Annuitant Mortality Table Disabled: 125% of the sex-distinct RP-2014 Disabled Mortality Tables All mortality tables are adjusted to future years using generational projection under Scale MP-2014 to anticipate future mortality improvement.
Active Participant	Active participants are defined as those with at least two months of employment in the most recent plan year and who have accumulated at least one pension credit, excluding those who have retired as of the valuation date and those who work for an employer that has withdrawn from the Plan on or before the valuation date.
Exclusion of Inactive Vested Participants	Inactive participants over age 70 are excluded from the valuation.
Operating Expenses	Operating expenses were assumed to be \$375,000 for the plan year beginning July 1, 2018 (equivalent to \$360,672 payable at the beginning of the year).

Summary of Assumptions and Methods

Assumption or Method	Description of Assumption or Method		
Retirement Rates	Age (if eligible for retirement)		Retirement Rate
	55-59		10%
	60-61		20%
	62		75%
	63-65		50%
	66-69		25%
	70		100%
Inactive Vested Commencement	Retirement is assumed to occur at age 65 for participants with fewer than 15 pension credits, and at the later of current age or age 55 for participants with at least 15 pension credits.		
Sample Rates (before Retirement)	Age	Disability Rate (%)	Withdrawal Rate (%) (until earliest eligibility for a pension)
	20	0.05	6.58
	25	0.05	5.27
	30	0.05	4.83
	35	0.06	4.47
	40	0.09	3.84
	45	0.18	3.21
	50	0.40	1.52
	55	0.85	0.33
	60	1.74	0.00

Summary of Assumptions and Methods

Assumption or Method	Description of Assumption or Method
<i>Weeks (Hours) Worked</i>	Average of weeks worked in the preceding plan year. For the plan year beginning July 1, 2018, each active participant is assumed to work 49 weeks (1,960 hours) per year. For the plan year beginning July 1, 2017 the assumption was 49 weeks (1,960 hours) per active participant per year.
<i>Future Benefit Accruals</i>	One pension credit per plan year.
<i>Contribution Income</i>	For the purpose of projecting future contribution income, it is assumed contributions are earned based on the total number of hours worked for participants during the plan year preceding the valuation date. Participants are assumed to continue to work for the employer reported in the data and at the rate required by that employer's contract.
<i>Asset Method</i>	The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the projected market return, and is recognized over a five-year period (10-year period for the plan year investment loss in the year ended June 30, 2009). The actuarial value is further adjusted, if necessary, to be within 20% of the market value.
<i>Actuarial Cost Method</i>	Unit Credit Cost Method.

Summary of Assumptions and Methods

Assumption or Method	Description of Assumption or Method
Form of payment	Unmarried participants are assumed to elect a Life Annuity. Married participants are assumed to elect a reduced 75% Joint and Survivor Annuity.
Marriage	75% of participants are assumed married.
Spouse Age	Wives are assumed to be three years younger than their husbands, if actual age is unknown.
Missing or Incomplete Participant Data	Assumed to be the same as those exhibited by participants with similar known characteristics. For those with unknown gender, gender was assumed to be male.
Unfunded Vested Benefits for Employer Withdrawals	Interest: - For liabilities up to the market value of assets, liabilities are valued using interest rates used by PBGC for plan terminations. For the July 1, 2018 valuation these are 2.27% and 2.59% (for 20 years and thereafter, respectively). Operating expenses as prescribed by PBGC formula (29CFR Part 4044, Appendix C) are included for liabilities determined using PBGC termination interest rates. - For liabilities in excess of the market value of assets, valued using 7.50% for all years. All other assumptions are the same as those used for the funding valuation.

Summary of Plan Provisions

Plan Provision	Description of Plan Provision
Plan Year	The twelve-month period beginning July 1 and ending June 30.
Participants	An Employee becomes a participant in the Plan on January 1 or July 1 after completing four months of covered employment in any consecutive 12-month period.
Normal Form of Payment	For unmarried participants, a Life Annuity. For married participants, actuarially reduced 75% Joint and Survivor Annuity.
Cost of Living Increases	None.
Benefit Service	$\frac{1}{4}$ Pension Credit for each two months of covered employment, with a maximum of one pension credit after eight months. The maximum total pension credits for benefit purposes is 35.
Vesting Service	One year of vesting service for four months of covered employment.
Break-in-Service	A break in service occurs in any plan year in which the participant fails to complete at least two months of work. In determining whether a break in service has been incurred, work in non-covered employment that is credited as vesting service will be considered covered employment.

Summary of Plan Provisions

Plan Provision	Description of Plan Provision
Regular Pension	<u>Eligibility:</u> An Employee is eligible for a Regular Pension if the Employee has attained age 65 and has earned 15 pension credits. <u>Amount of Benefit:</u> Upon retirement on his Regular Retirement Date, a Participant will be entitled to receive a monthly benefit equal to: • For work after on or after July 1, 2016, monthly benefit accruals are equal to 0.9% of total contributions made for the participant's work. • For pension credit earned on or after July 1, 2010 and before July 1, 2016, \$37.00 for each \$1.00 of hourly (benefit-bearing) employer contribution rate. • For pension credits earned on or after July 1, 1997 and before July 1, 2010, the accrual rate is \$49.00 for each \$1.00 of hourly employer contribution rate. • For pension credits prior to July 1, 1997, the accrued benefit based on prior plan formula increased by 20.75%.
Vested Benefit	<u>Eligibility:</u> Five or more years of service. <u>Amount of Benefit:</u> Regular Pension Payable at Normal Retirement Age.

Summary of Plan Provisions

Plan Provision	Description of Plan Provision
Contribution Rates	For the period beginning September 28, 2006 and ending June 30, 2016, in the event a contributing employer is obligated to make a special Supplemental Contribution to the Fund solely for the purpose of improving the funding status of the Plan, such Supplemental Contributions shall not be included in the calculation of a Participant's pension benefit. Effective July 1, 2016, all contributions are benefit-bearing under the newly adopted benefit formula (0.9% x Total Contributions). For the plan year ended June 30, 2018, total contribution rates range from \$191.55 to \$305.20 per week.
Service Pension	<u>Eligibility:</u> 20, 25, 30 or 35 pension credits <u>Amount of Benefit:</u> At the Service Pension Commencement Date, a Participant will be entitled to receive a monthly benefit equal to his Normal Retirement Benefit actuarially reduced for early commencement. If the participant retired before January 1, 2018, the Service Pension is determined under the Plan rules in effect at that time.

Summary of Plan Provisions

Plan Provision	Description of Plan Provision
Early Pension	<u>Eligibility:</u> An Employee is eligible for an Early Pension if the Employee has attained age 55 and has earned 15 pension credits. <u>Amount of Benefit:</u> Upon the Early Retirement Date, At the Service Pension Commencement Date, a Participant will be entitled to receive a monthly benefit equal to his Normal Retirement Benefit actuarially reduced for early commencement. If the participant retired before January 1, 2018, the Early Pension is determined under the Plan rules in effect at that time.
Disability Pension	<u>Eligibility:</u> Effective July 1, 2018 there is no disability benefit available to participants who were not already receiving benefits under disability. <u>Amount of Benefit:</u> If the participant retires on a Disability Pension on or after July 1, 1997, the Disability Pension is the greater of (a) \$400, or (b) the actuarial equivalent of the accrued benefit earned as of the last date worked. If the participant retired on a Disability Pension before July 1, 1997, the Disability Pension is determined under the Plan rules in effect at that time.

Summary of Plan Provisions

Plan Provision	Description of Plan Provision
Death Benefits	<u>Married:</u> If a participant is married and dies after earning the right to a Statutory Pension (5 years of service), the spouse will be entitled to a survivor benefit, as long as they were married for at least one year at the time of death. The spouse's monthly benefit is 75% of the benefit earned as of the day before death, subject to any reduction that would have applied for form of payment and payments before age 65. If the participant had not yet reached age 55, the benefit will be calculated as if they had reached age 55 and applied for an Early Retirement Pension immediately before death, with adjustment for form of payment and payments before age 65. <u>Unmarried:</u> For participant deaths after December 31, 2017, no death benefit is payable. If the participant died before January 1, 2018, death benefits are determined under the Plan rules in effect at that time
Special Death Benefit	For participant deaths after December 31, 2017, no death benefit is payable. If the participant died before January 1, 2018, death benefits are determined under the Plan rules in effect at that time

Actuarial Certification

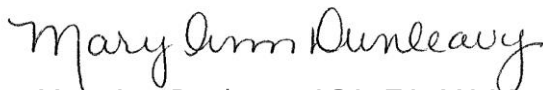
We have prepared this actuarial report for use by the **Industry & Local 338 Pension Plan** (the “Plan”). This report has been prepared solely for the benefit of the Plan, and it is not complete without the accompanying discussion with a representative of Horizon Actuarial Services, LLC. This report should not be distributed to others not affiliated with the Plan or relied upon by any other person without prior written consent from Horizon Actuarial Services, LLC.

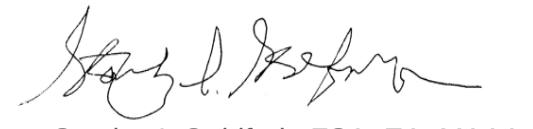
In preparing this report, we have relied on all the information and data provided by the Plan, including plan provisions and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have reviewed the data for reasonableness to the extent that we believe appropriate based on the purpose for which it has been used.

The analysis contained in this report may involve actuarial calculations. Actuarial calculations require that we make assumptions about future events. We have used assumptions that we believe are reasonable and appropriate for the purpose for which they have been used. Other assumptions may also be reasonable and could result in substantially different results. Because it is not possible or practical to model all aspects of a situation, we may use summary information, estimates, or simplifications of calculations to facilitate the modeling of future events. We may also exclude factors or data that are immaterial in our judgment.

Future events and actual experience will vary from any assumptions we have used, and calculations prepared with actual data will vary from estimates or summaries used for modeling purposes. Actual future results will differ from our projections. As these differences arise, contributions and/or benefits may need to be adjusted to take these changes into account.

In our opinion, any methods, assumptions, and calculations are in accordance with the applicable provisions of the Internal Revenue Code and ERISA, and the procedures followed and presentation of results conform with generally accepted actuarial principles and practices. The undersigned consultants of Horizon Actuarial Services, LLC with actuarial credentials meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. There is no relationship between the Plan and Horizon Actuarial Services, LLC that affects our objectivity.


Mary Ann Dunleavy, ASA, EA, MAAA
Consulting Actuary


Stanley I. Goldfarb, FSA, EA, MAAA
Actuary and Managing Consultant