Horizon
Actuarial Services, LLC

Industry & Local 338 Pension Plan

July 1, 2019 PPA Certification and Actuarial Update

July 16, 2019

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Today's Discussion

- **Funding Under PPA**
- **2019 PPA Zone Status Certification – Preliminary Discussion**
- **Forecast Scenarios**
- **Life After Critical Status**
- **2019 – 2020 Plan Year Timeline**
- **Appendix**
  - PPA Certification Zone Statuses
  - Contribution Rate Summary

Funding Under PPA

Plan History Under PPA

Plan Year Begins	PPA Zone	Progress	Special Elections	Remediation Plan
7/1/2008	Green	N/A	N/A	N/A
7/1/2009	Green	N/A	PRA'10: 10-year Smoothing in AVA, Expanded Corridor, & Extended ENIL Amortization	N/A
7/1/2010	Green	N/A	N/A	N/A
7/1/2011	Green	N/A	N/A	N/A
7/1/2012	Green	N/A	N/A	N/A
7/1/2013	Green	N/A	N/A	N/A
7/1/2014	Green	N/A	N/A	N/A
7/1/2015	Green	N/A	N/A	N/A
7/1/2016	Yellow, Projected Red w/in 5 years	N/A	N/A	Funding Improvement Plan Adopted 5/22/2017
7/1/2017	Red	N/A	N/A	Rehabilitation Plan Adopted 9/18/2017
7/1/2018	Red	N/A	N/A	No Change

Plan History Under PPA (cont.)

- **Beginning in the 2009 plan year, a supplemental contribution requirement was imposed.**
  - Supplemental contributions were not benefit bearing
  - Contribution increase requirements were updated periodically
- **Benefit accruals changed effective 7/1/2016**
  - Benefit accruals are 0.9% of contributions
    - All contributions are benefit bearing
  - At 7/1/2016, total contribution rates were between 190% and 220% of the previously benefit bearing contribution rate
- **7/1/2016 – 6/30/2017 Plan Year**
  - Plan was certified in Endangered Status and Projected to be in Critical Status within 5 years.
  - Funding Improvement Plan (FIP), adopted 5/22/2017
    - Critical Status and Rehabilitation Plan was adopted before any contract was required to include the terms of the FIP

Plan History Under PPA (cont.)

- **7/1/2017 – 6/30/2018 Plan Year**
  - Plan was certified in Endangered Status and Projected to be in Critical Status within 5 years. The Trustees elected Critical Status 9/18/2017.
  - Rehabilitation Plan (RP), adopted 9/18/2017
    - All contracts must include a schedule of the Rehabilitation Plan – Contribution rate increases and benefit changes
  - Rehabilitation Period is 7/1/2020 – 6/30/2030
  - Restrictions:
    - The Plan may not pay lump sums or other accelerated payment forms
    - During the Rehabilitation Plan adoption period, the Trustees cannot:
      - Accept a contract that calls for a reduction in the level of contributions for any participants, suspension of contributions for any period of service, or a new exclusion of a group of participants. or
      - Amend the Plan to increase benefits or change the rate at which benefits vest unless required by law.
    - Contribution increases required by a RP that are effective for plan years beginning after December 31, 2014 are not included for purposes of determining withdrawal liability or withdrawal liability payment amounts

Rehabilitation Plan

- **Rehabilitation Plan (RP), adopted September 18, 2017**
  - Contribution rate increases. Annual, cumulative to a total of 10:
    - Flat dollar schedule equivalent to 6.5% of the average contribution rate in effect July 1, 2017
  - Benefit changes – Adjustable Benefits eliminated, effective January 1, 2018:
    - 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
  - Surcharges and the default schedule were imposed on open contracts after 180 days.

Rehabilitation Plan (cont.)

- **Annual Updates**
  - Each year, the Trustees must review (and may need to update) the Rehabilitation Plan
  - Once the Rehabilitation Period begins, the actuary must certify whether the Plan is making "scheduled progress"
    - Form 5500: Progress as of the end of the plan year is reported
    - Annual Certification: the actuary certifies progress as of the beginning of the plan year
    - Consequences of no progress: Excise tax on accumulated funding deficiency if certified as not making progress for three years in a row
- **Emergence from Critical Status**
  - The plan is not projected to have an accumulated funding deficiency for the plan year or any of the 9 succeeding plan years, taking into account any extension of amortization periods under section 431(d)(1), and the plan is not projected to become insolvent for any of the 30 succeeding plan years

2019 PPA Zone Status Certification
- Preliminary Discussion

2019 PPA Certification

- **Certification must be submitted by the 90th day of the Plan Year**
  - September 28, 2019
- **Preliminary Assets**
  - 5.03% return on assets for the plan year ending June 30, 2019
    - Estimated year-to-date return on investments provided by SEI
- **Projected liabilities**
  - Based on results of the July 1, 2018 actuarial valuation
  - Plan changes known at the time of certification should be reflected

2019 PPA Certification (continued)

- **Projected Contributions: Industry Activity Assumption**
  - PPA requires that the actuary's annual certification of the zone status of a multiemployer plan reflects industry activity assumptions that are based on input from the Trustees, provided in good faith
  - The industry activity assumption is very important, as it directly affects the level of the contributions expected in future years
  - Assumption is often based on prior year's work levels or contributions
  - Reflecting Anticipated Employer Withdrawals:
    - Culinart withdrawal May 10, 2019
      - Withdrawal Liability assumed to be collectible
    - College of New Rochelle withdrawal August 10, 2019: 10,300 total weeks for each plan year beginning July 1, 2019 (PYB 2019)
      - Withdrawal Liability assumed to be uncollectible

2019 PPA Certification: Industry Activity

Plan Year	Active Count	Average Hours Worked per Active	Average Ultimate Contribution Rate
7/1/2019 – 6/30/2020	?	?	?
7/1/2018 – 6/30/2019	9-month average= 245 (34 CNR+ Culinart)	?	?
7/1/2017 – 6/30/2018	238	1,960	$ 6.53
7/1/2016 – 6/30/2017	238	1,900	6.24
7/1/2015 – 6/30/2016	243	1,900	5.80
7/1/2014 – 6/30/2015	265	2,009	5.38
7/1/2013 – 6/30/2014	306	2,053	5.58
7/1/2012 – 6/30/2013	326	1,997	5.17
7/1/2011 – 6/30/2012	382	2,046	4.44
7/1/2010 – 6/30/2011	412	2,023	?
7/1/2009 – 6/30/2010	431	2,098	?

Historical contribution information for plan years prior to 7/1/2015 – 6/30/2016 obtained from prior years' actuarial valuation reports.

2019 PPA Certification (continued)

- **Projected Contributions: Contribution Rates**
  - Only rate increases already included in CBAs as of the certification date are recognized
    - Settled Contracts that include the Preferred Schedule of the RP
      - Crowley LaFargeville, CBA term 11/1/2017 – 10/31/2020
      - LP Transportation, CBA term 8/15/2018 – 8/14/2019
      - Montefiore New Rochelle, CBA term 2/25/2017 – 11/5/2020
      - Paraco Gas, CBA term 1/31/2018 - 1/31/2021
      - Friesland, CBA term 12/31/2018 – 12/31/2021 (option to open contract 1/1/2021)
    - Open Contracts
      - Westchester Local 860, Expired 9/30/2013

Contribution Increases Required by the Rehabilitation Plan

Year	Rate Increase
1	17.55
2	18.69
3	19.91
4	21.20
5	22.58
6	24.05
7	25.61
8	27.27
9	29.05
10	30.93

Contract	Increases when RP was Initially Effective	Number of 10 Increases Anticipated by the RP Remaining	Comments
College of New Rochelle	2018 - 2019 (2 Increases)	8 (beginning 4/2020)	Withdrawn 8/2019
Crowley LaFargeville	2017 - 2019 (3 Increases)	7 (beginning 11/2020)	
Culinart	2018 - 2019 (2 Increase)	8 (beginning 4/2020)	Withdrawn 6/2019
Friesland Campina	2018 - 2020 (2 Increases)	8 (beginning 1/2021)	
LP Transport	2018 (1 Increase)	9 (beginning 8/2019)	
Montefiore New Rochelle	2018 - 2019 (3 Increases)	7 (beginning 11/2020)	
Paraco Gas	2018 - 2020 (3 Increases)	7 (beginning 2/2021)	
Westchester L860	N/A	10 (beginning 4/2018)	

1) All contributions are benefit-bearing, effective beginning July 1, 2016.
2) The contribution rate increases shown are to be applied cumulatively such that the increase applicable for a given year is applied in addition to increases for all prior years.

Contract Summary

Employer	Contract Expiration Date	2018-2019 Average Active Count (July – March)	As of 7/1/2018 Active Count (Valn Data)	Total Wkly Contrib Rate	Expected Weeks Worked	Expected Date of Withdrawal	For a withdrawal in PYB 2017 Estimated Withdrawal Liability	Estimated Annual Payment	Estimated Number of Payments
College of New Rochelle	8/31/2019	20	17	$ 208.95	850	8/10/2019	$3,972,338	$290,611	20 years
Crowley LaFargeville	10/31/2020	89	92	286.43	4,500				
Culinart	12/31/2019	14	20	267.15	1,000	5/10/2019	$3,207,145	$187,126	20 years
Friesland Campina	12/31/2021	65	59	247.60	2,900				
LP Transport	8/15/2019	33	29	322.75	1,400				
Montefiore New Rochelle	11/5/2020	16	12	251.61	600				
Paraco Gas	1/31/2021	7	8	245.15	400				
Westchester L860	9/30/2013	1	1	243.28	50				
		245	238		11,700				

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.
4) Estimated withdrawal liability for the College is a rough estimate based on valuation contribution data.
5) Estimated withdrawal liability for Culinart was provided at the company's request 1/3/2019.

Forecast Scenarios

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
    - No future expected gains or losses other than those attributable to investment returns, as applicable
  - No assumption changes to account for possible changes to participant behavior due to benefit changes made by the RP
  - No changes to valuation methods / no amortization extensions.
  - Investment Earnings
    - 5.03% return on assets for the plan year ending June 30, 2018
    - 7.50% per year, net of investment-related expenses, thereafter
  - 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. Additional scenarios available upon request.

Projection Assumptions

- **Contributions:**
  - Work Levels
    - 13,000 total weeks for the plan year beginning July 1, 2018
      - Based on a projection of contributions reported by the admin from 7/1/2018 – 3/31/2019
    - 10,300 total weeks each plan year beginning July 1, 2019
  - Contribution Rates
    - <1% of weeks worked under contracts that are expected to renew in PYB 2018
      - Westchester Local 860
    - 16% of weeks worked under contracts that are expected to renew in PYB 2019
      - LP Transport
    - 81% of weeks worked under contracts that are expected to renew in PYB 2020
      - HP Hood / Crowley, Montefiore New Rochelle, Friesland
    - 3% of weeks worked under contracts that are expected to renew in PYB 2021
      - Paraco
  - All contribution rate increases are benefit-bearing
  - All contribution rate increases are compounded

Other assumptions may be reasonable and could produce different results. Additional scenarios available upon request.

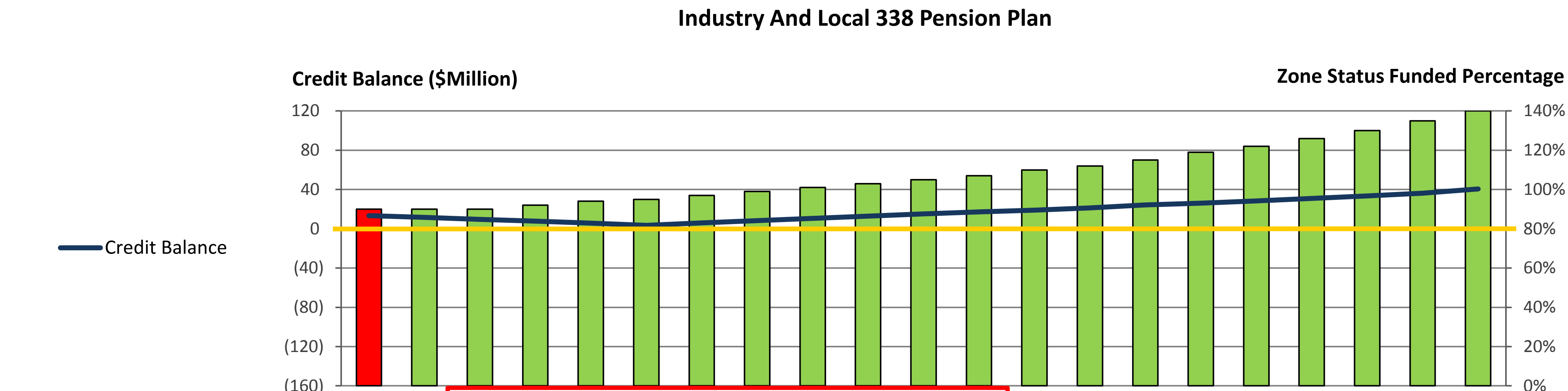
Projection Roadmap – No Additional Rate Increases

Scenario	Investment Return PYE 2019 / PYE 2020+	Weeks Worked Each year PYE 2019+	Zone Status 2019-2020 / 2020-2021	RP Requires Emergence 7/1/2030 Emerge	EOY FSA Balance	% Funded 7/1/2030	Weekly Contrib Rate 7/1/2030
1 College and Culinart Withdraw Culinart pays Withdrawal Liability	7.50% / 7.50%	9,800	**Green / Green**	**Yes**	$17M	110%	$310
2 - Baseline; College and Culinart Withdraw Culinart pays Withdrawal Liability Reflect YTD Investment Return	**5.03%** / 7.50%	9,800	**Green / Green**	**Yes**	$14M	105%	$310
3 College and Culinart Withdraw, Culinart pays Withdrawal Liability Reflect YTD ROA and Increased Work Levels	5.03% / 7.50%	**10,300**	**Green / Green**	**Yes**	$16M	107%	$308
4 Lower Return in 2019 College and Culinart Withdraw, Culinart pays Withdrawal Liability Reflect YTD Investment Return	5.03% / **-7.50% /** 7.50%	10,300	**Green / Red**	**Emergence 2019 Critical 2020**	**$-2M**	79%	$308
5 Combine Charge Bases College and Culinart Withdraw, Culinart pays Withdrawal Liability Reflect YTD Investment Return	5.03% / 7.50%	10,300	**Red / Red**	**Yes**	$3M	107%	$308
6 Change Valuation Discount Rate College and Culinart Withdraw, Culinart pays Withdrawal Liability Reflect YTD Investment Return	5.03% / **7.25%**	10,300	**Green / Green**	**Yes**	$11M	101%	$308

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: Two Employers Withdraw; Withdrawal Liability Paid

7.50% Return PYB 2018+ | 9.8 Thousand Weeks Worked beginning PYB 2019 |
Current CBA Contribution Increases only | Culinart Withdrawal Liability Payments Collected



Plan Year Beginning 7/1	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
(1) Investment Return (%)	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
(2) Weeks Worked(Thousands)	11.5	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
(3) Weekly Contribution Rate ($)	274	303	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310
(4) Contributions+EWL Payments($M)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
(5) Actuarial Value of Assets ($M)	93	92	93	95	96	97	98	100	101	102	104	105	107	109	111	113	115	118	120	123	126
(6) Zone Status Liability ($M)	102	102	102	102	102	101	101	100	100	99	99	98	97	96	96	95	94	93	92	91	90
(7) Credit Balance ($M)	13	12	10	8	6	4	6	8	11	13	15	17	19	21	24	26	28	31	34	36	41
(8) Zone Status Funded Percentage	90%	90%	90%	92%	94%	95%	97%	99%	101%	103%	105%	107%	110%	112%	115%	119%	122%	126%	130%	135%	140%

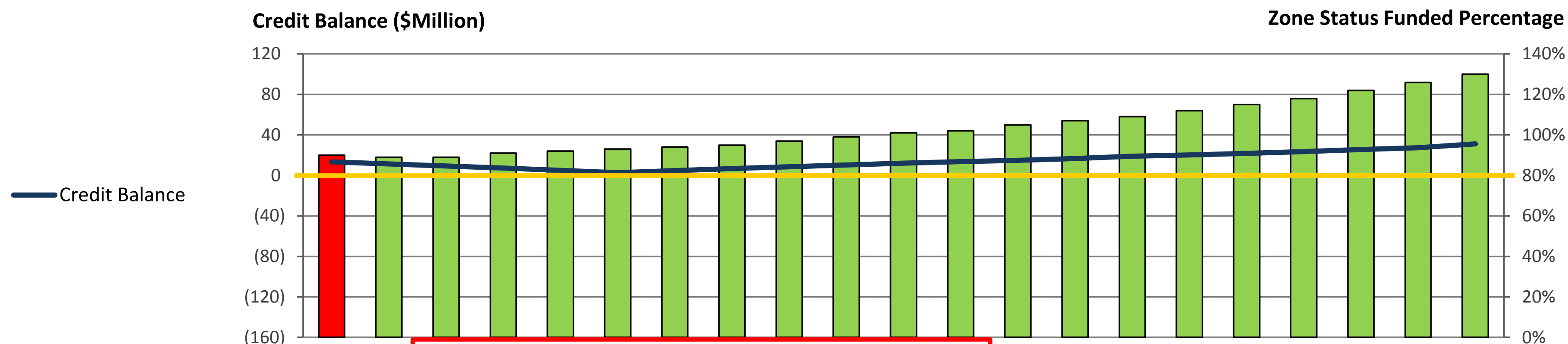
Notes

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 2: Reflect ‘18-’19 Plan Year-to-Date Investment Return

5.03% Return PYB 2018; 7.50% Return PYB 2019+ | 9.8 Thousand Weeks Worked beginning PYB 2019 | Current CBA Contribution Increases only | Culinart Withdrawal Liability Payments Collected

Industry And Local 338 Pension Plan



Plan Year Beginning 7/1	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
(1) Investment Return (%)	5.03	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
(2) Weeks Worked(Thousands)	11.5	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
(3) Weekly Contribution Rate ($)	274	303	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310	310
(4) Contributions+EWL Payments($M)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
(5) Actuarial Value of Assets ($M)	93	92	92	93	94	94	95	96	97	98	100	101	102	104	105	107	109	111	113	115	118
(6) Zone Status Liability ($M)	102	102	102	102	102	101	101	100	100	99	99	98	97	96	96	95	94	93	92	91	90
(7) Credit Balance ($M)	13	11	9	7	5	3	5	7	8	10	12	14	15	17	19	20	22	24	26	27	31
(8) Zone Status Funded Percentage	90%	89%	89%	91%	92%	93%	94%	95%	97%	99%	101%	102%	105%	107%	109%	112%	115%	118%	122%	126%	130%

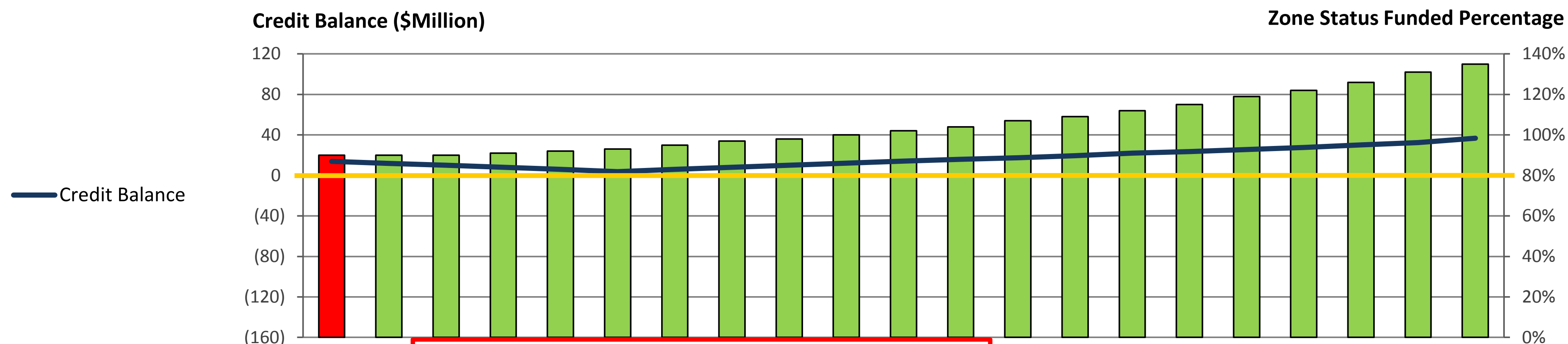
Notes

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 3: Increased Work Levels

5.03% Return PYB 2018; 7.50% Return PYB 2019+ | 10.3 Thousand Weeks Worked beginning PYB 2019 | Current CBA Contribution Increases only | Culinart Withdrawal Liability Payments Collected

Industry And Local 338 Pension Plan



Plan Year Beginning 7/1	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
(1) Investment Return (%)	5.03	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
(2) Weeks Worked(Thousands)	13.0	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
(3) Weekly Contribution Rate ($)	274	301	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308
(4) Contributions+EWL Payments($M)	3.6	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
(5) Actuarial Value of Assets ($M)	93	92	92	94	95	95	96	98	99	100	102	103	105	107	109	111	113	115	117	120	123
(6) Zone Status Liability ($M)	102	102	102	102	102	102	101	101	100	100	99	98	98	97	96	95	95	94	93	92	91
(7) Credit Balance ($M)	14	12	10	8	6	4	6	8	10	12	14	16	17	19	22	24	25	28	30	32	37
(8) Zone Status Funded Percentage	90%	90%	90%	91%	92%	93%	95%	97%	98%	100%	102%	104%	107%	109%	112%	115%	119%	122%	126%	131%	135%

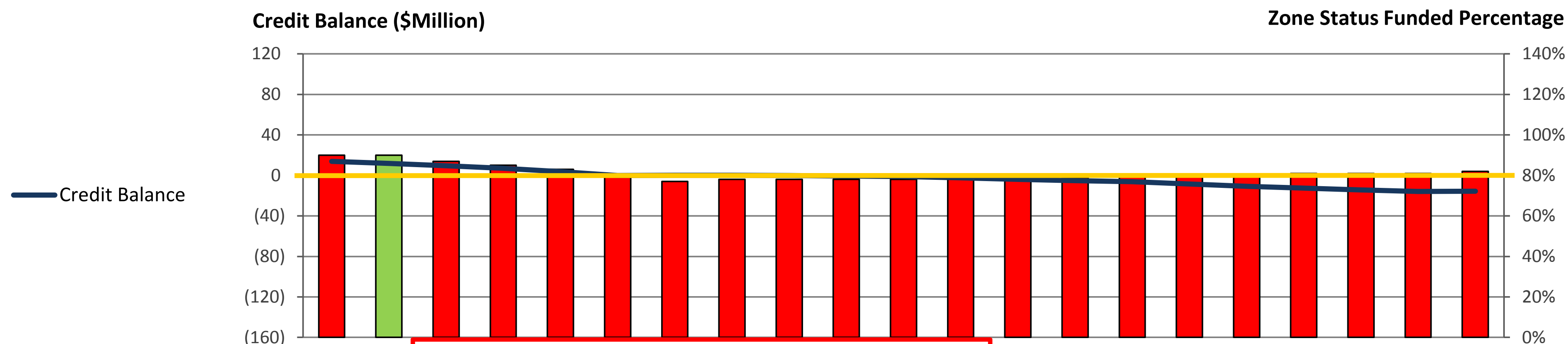
Notes

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 4: Lower Investment Return in 2019

5.03% Return PYB 2018; -7.50% Return PYB 2019; 7.50% Return PYB 2020+ | 10.3 Thousand Weeks Worked beginning PYB 2019 | Current CBA Contribution Increases only | Culinart Withdrawal Liability Payments Collected

Industry And Local 338 Pension Plan



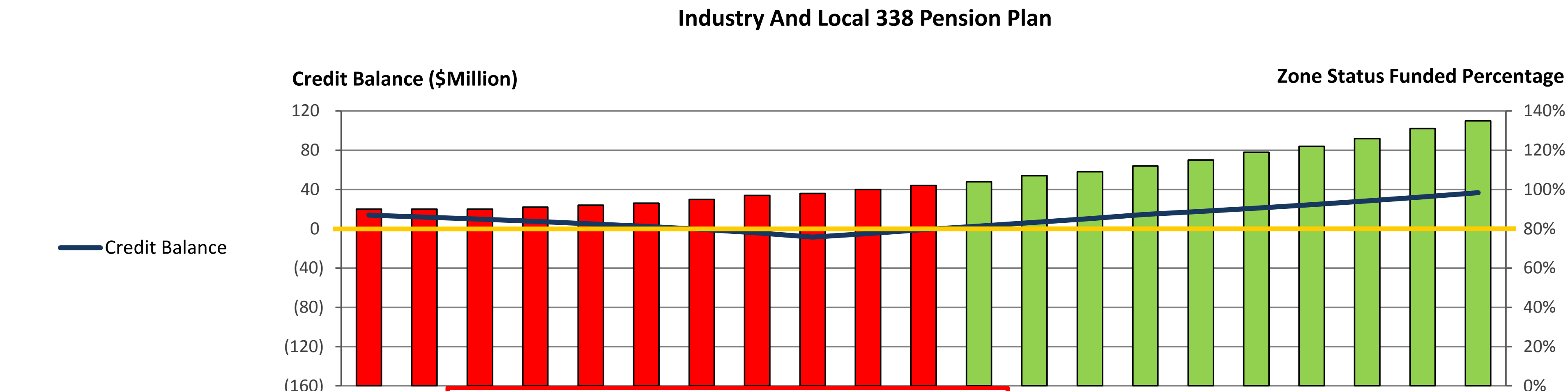
Plan Year Beginning 7/1	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
(1) Investment Return (%)	5.03	(7.50)	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
(2) Weeks Worked(Thousands)	13.0	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
(3) Weekly Contribution Rate ($)	274	301	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308
(4) Contributions+EWL Payments($M)	3.6	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
(5) Actuarial Value of Assets ($M)	93	92	90	88	85	82	79	79	79	78	78	78	78	77	77	77	76	76	75	75	75
(6) Zone Status Liability ($M)	102	102	102	102	102	102	101	101	100	100	99	98	98	97	96	95	95	94	93	92	91
(7) Credit Balance ($M)	14	12	10	7	4	(0)	0	0	(0)	(1)	(1)	(2)	(4)	(5)	(6)	(8)	(11)	(13)	(14)	(16)	(16)
(8) Zone Status Funded Percentage	90%	90%	87%	85%	83%	80%	77%	78%	78%	78%	78%	79%	79%	79%	80%	80%	80%	81%	81%	81%	82%

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 5: Combine and Offset Charge Bases

5.03% Return PYB 2018; 7.50% Return PYB 2019+ | 10.3 Thousand Weeks Worked beginning PYB 2019 | Current CBA Contribution Increases only | Culinart Withdrawal Liability Payments Collected



Plan Year Beginning 7/1	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
(1) Investment Return (%)	5.03	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
(2) Weeks Worked(Thousands)	13.0	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
(3) Weekly Contribution Rate ($)	274	301	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308
(4) Contributions+EWL Payments($M)	3.6	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
(5) Actuarial Value of Assets ($M)	93	92	92	94	95	95	96	98	99	100	102	103	105	107	109	111	113	115	117	120	123
(6) Zone Status Liability ($M)	102	102	102	102	102	102	101	101	100	100	99	98	98	97	96	95	95	94	93	92	91
(7) Credit Balance ($M)	14	12	10	8	5	2	(1)	(4)	(8)	(5)	(1)	3	6	10	15	18	21	25	28	32	37
(8) Zone Status Funded Percentage	90%	90%	90%	91%	92%	93%	95%	97%	98%	100%	102%	104%	107%	109%	112%	115%	119%	122%	126%	131%	135%

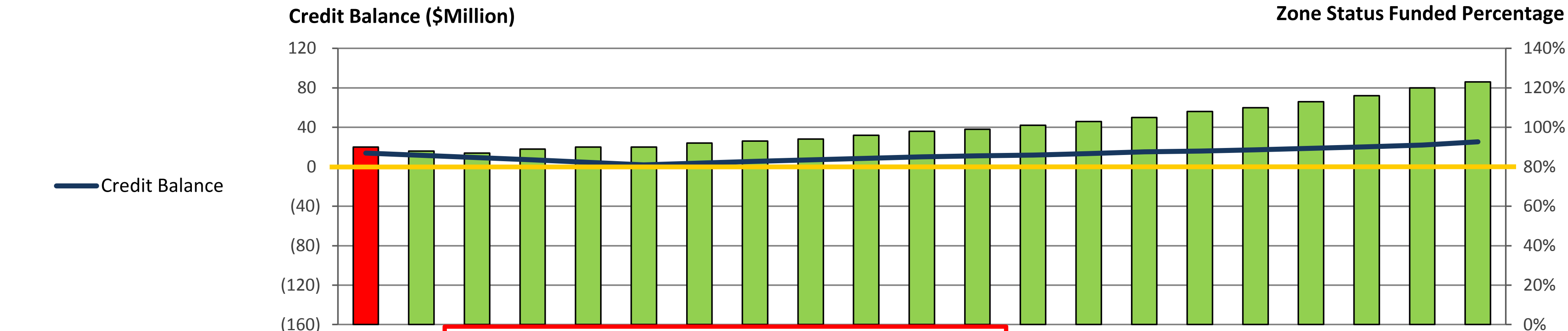
Notes

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 6: Lower Interest Rate to 7.25%

5.03% Return PYB 2018; 7.25% Return PYB 2019+ | 10.3 Thousand Weeks Worked beginning PYB 2019 | Current CBA Contribution Increases only | Culinart Withdrawal Liability Payments Collected

Industry And Local 338 Pension Plan



Plan Year Beginning 7/1	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
(1) Investment Return (%)	5.03	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25
(2) Weeks Worked(Thousands)	13.0	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3	10.3
(3) Weekly Contribution Rate ($)	274	301	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308
(4) Contributions+EWL Payments($M)	3.6	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
(5) Actuarial Value of Assets ($M)	93	92	92	93	94	94	95	96	97	98	99	100	101	102	104	105	107	108	110	112	114
(6) Zone Status Liability ($M)	102	105	105	104	104	104	103	103	102	102	101	100	100	99	98	97	96	95	94	93	92
(7) Credit Balance ($M)	14	12	9	7	5	2	4	5	7	9	10	11	12	13	15	16	17	19	20	22	25
(8) Zone Status Funded Percentage	90%	88%	87%	89%	90%	90%	92%	93%	94%	96%	98%	99%	101%	103%	105%	108%	110%	113%	116%	120%	123%

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.

Life After Critical Status

Emergence from Critical Status

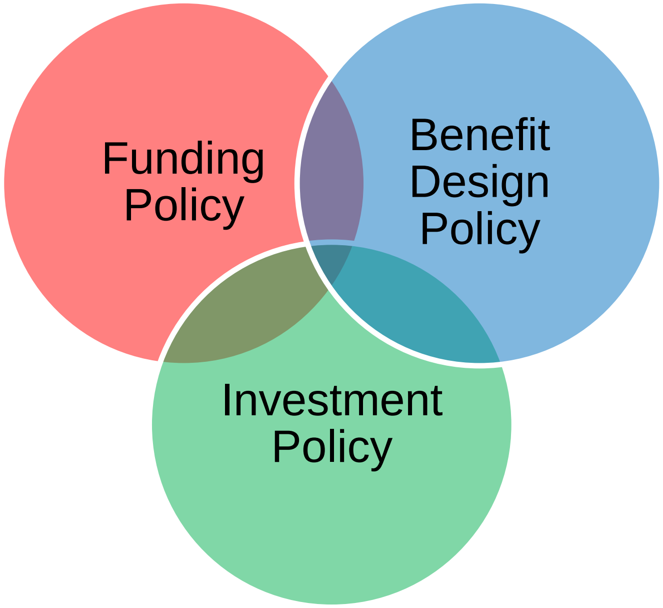
- **When the Plan emerges from critical status, what happens?**
- **Terms of the Plan / Rehabilitation Plan**
  - Plan Benefits
    - The Plan has been amended to reduce benefits; increasing the current benefit levels would require that the amortization extensions elected effective 9/1/2008 be revoked
  - Contribution Rates
    - The RP anticipates annual contribution rate increases, cumulative to a total of 10
- **Once the Plan emerges from critical status, how best to keep it out of critical status?**
  - Strategies (policies) for managing risk

Pension Risks

- **There are multiple risks inherent in all types of retirement plans, including (but not limited to):**
  - Inadequate benefits
  - Insufficient funding of promised benefits
  - Volatility of contributions and benefits (primarily due to volatility of investment returns)
  - Contribution base risk (plan maturity)
  - PBGC-related risks (higher premiums)
  - Longevity risk

How Can Risk Be Managed?

- **Through these three interconnected policies:**



- **None of the three policies can operate effectively independently of the other two. Some examples:**
  1. A more aggressive investment policy means greater return volatility and risk of underfunding…

     …increasing the need for a prudent funding policy to absorb adverse experience
  2. A benefit design policy that targets a specific income replacement level…

     …needs appropriate funding and investment policies to help stabilize contributions

Funding Policy

What is a Funding Policy?

- **A funding policy establishes a formal connection between contributions and benefits, including rules for:**
  - Benefit improvements and/or contribution reductions when experience is favorable, and
  - Benefit reductions and/or contribution increases when experience is unfavorable
- **ERISA requires funding policies, but policies are often minimally designed, simply to comply with the ERISA rule**
- **From the Industry & Local 338 Pension Fund Annual Funding Notice:**
  - The funding policy of the Plan is that the Plan is funded by contributions made by employers pursuant to collective bargaining agreements with Teamster Union Locals 445, 687 and 317, the local unions that represent the Plan's participants.

Funding Policy

- **PPA rehabilitation plans and funding improvement plans are forms of "statutory funding policies"**
  - In effect, the Plan's Rehabilitation Plan has served as its funding policy since 2011
- **Once the Plan emerges from critical status, a well designed funding policy can help guide the Plan's operation and stabilize funding by establishing objective criteria for:**
  - Benefit improvements (including restoration of prior reductions) and/or contribution reductions when experience is favorable, and
  - Benefit reductions and/or contribution increases when experience is unfavorable.
- **Funding policies can minimize the chance of funding shortfalls, as well as address them if they occur, by establishing appropriate funding cushions**

Funding Policy

- **Short-term Funding Policy Solution: Repurpose the Rehabilitation Plan as a post-critical status funding policy**
  - Require contribution increases to a total of ten annual increases under all contracts (even if Plan emerges from critical status earlier)
- **Longer-term goal: Review pension risk and connect the Plan's benefit design policy to the funding and investment policies**
- **Use funding projections and "stress testing" to design the optimal funding policy**

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 levels for continuing actives remains level, 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.

2019 – 2020 Plan Year Timeline

2019 – 2020 Plan Year Timeline – PPA

Event	Deadline / Information	Latest Date
Actuarial Certification	90 days into plan year	9/28/2019
Notice of Critical Status (if applicable)	30 days after actuarial certification	10/28/2019
Review and Update Rehabilitation Plan (if applicable)	Rehabilitation Plan adopted 9/18/2017; Review annually during the Rehabilitation Period	6/30/2020
Rehabilitation Period	After expiration of contracts covering at least 75% of active participants, not later than first of plan year following second anniversary of adoption of RP	7/1/2020

2019 – 2020 Plan Year – Other Actuarial Information

Event	Deadline / Information	Latest Date
Annual Funding Notice	120 days after the end of the plan year	10/28/2019
Schedule MB (Form 5500)	Last day of the 7th month following the end of the Plan Year (2½ month extension available)	1/31/2020 (w/o ext) 4/15/2020 (with ext)
ERISA 104(d) Notice	30 days after due date Form 5500 filing	3/1/2020 (w/o ext) 5/15/2020 (with ext)
PBGC Premium Filing	15th day of the 10th full calendar month in the Plan Year	4/15/2020
Actuarial Valuation		N/A
Review of Actuarial Assumptions	In conjunction with the actuarial valuation	N/A

Appendix

PPA Certification Zone Statuses

Critical	**Critical and Declining (NEW)**
In general, a projected funding deficiency in the next 4 or 5 years (other factors may apply)	*In critical status, and projected to go insolvent within the 20 years (15 years in some cases)*
Endangered*	**Seriously Endangered**
Under 80% funded <u>or</u> a projected funding deficiency in the next 7 years	*Under 80% funded <u>and</u> a projected funding deficiency in the next 7 years*

"Green Zone"

(none of the above)

New special rules, in effective as of 12/31/2014:

- A plan newly in endangered status that would require no corrective action under a funding improvement plan is considered in the "Green Zone".
- A plan projected to enter critical status in the next 5 plan years may elect to be in critical status immediately.*

Historical Contribution Rates by Contract

Employer	Base Rate	As of Plan Year Ending 2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
College of New Rochelle	$ 110.44	$ 130.40	$ 143.60	$ 158.00	$ 174.00	$ 174.00	$ 174.00	$ 174.00	$ 174.00	$ 208.95	$ 269.04
Crowley LaFargeville	130.00	154.00	169.00	186.34	204.97	225.47	248.00	272.79	286.43	303.98	322.67
Culinart	108.44	128.08	141.08	154.98	170.48	187.53	206.28	226.91	226.91	267.15	267.15
Friesland Campina	100.12	121.13	133.25	146.57	161.23	177.35	195.09	205.09	215.09	247.60	242.64
LP Transport	160.00	160.00	176.00	192.00	208.00	228.80	251.60	276.80	290.80	322.75	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	270.30
Paraco Gas	124.00	140.00	148.00	156.00	172.00	188.00	206.80	227.60	227.60	245.15	263.84
Westchester L860	130.15	154.17	169.59	186.55	205.21	205.21	205.21	205.21	205.21	243.28	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 Plan Provisions & Participant Eligibility

Prior to Rehabilitation Plan

Plan Provision	Description			7/1/2016 Actives	7/1/2016 Inactives
Valuation Population				243	247
Accrual Rate	0.9% of Contributions (Effective 7/1/2016)			243	N/A
Vesting Service	4 months worked during a Plan year	Non-vested		55	N/A
		Vested, less than 15 Credits		112	201
		Vested, at least 15 Credits		76	46
Early Retirement	Age 55 with 15 Pension Credits:			41	34
	2% per year, prior to age 65 (accrued prior to July 1, 2010)				
	6% per year, prior to age 65 (accrued on and after July 1, 2010)		Subsidies		
Service Pension	20 Pension Credits: benefit reduced by 50%			13	9
	25 Pension Credits: benefit reduced by 10%			12	5
	30 Pension Credits: benefit reduced by 5%			6	3
	35 Pension Credits: unreduced benefit			8	0
Disability Retirement	10 Pension Credits & Totally and Permanently Disabled:			133	N/A
	Actuarially reduced benefit, not less than $400		Ancillary Benefits		
Death Benefit for Unmarried Participants	A 120-Month Certain Benefit	Married		141	141
		Single / Unknown		102	102
Normal Form	For unmarried participants, a Life Annuity with 120-month certain period.		Subsidy	102	102
	For married participants, a 75% J&S Annuity with 120-month certain period.			141	141

Data, Assumptions, Methods and Provisions

Please refer to the Appendix of Horizon Actuarial Services April 23, 2019 Valuation Presentation for more detail.

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.

We have not performed a detailed analysis of the potential effects of risk on the Plan's future financial condition, but have included a discussion of some risks that may significantly affect the Plan. A more detailed assessment of the risks could provide the Trustees with a better understanding of the risks inherent in the Plan and may include additional scenario testing, sensitivity testing, stress testing and stochastic modeling.

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.

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

Mary Ann Dunleavy
Mary Ann Dunleavy, ASA, EA, MAAA
Consulting Actuary