Horizon
Actuarial Services, LLC

Industry & Local 338 Pension Plan

July 1, 2020 Actuarial Update

September 22, 2020

Mary Ann Dunleavy, ASA
Dylan Nitta

Atlanta ■ Cleveland ■ Denver ■ Irvine ■ Los Angeles
Miami ■ San Diego ■ San Francisco ■ Washington, D.C.

Today's Discussion

- **2020 PPA Zone Status Certification – Review**
- **Funding Projections**
- **2020 – 2021 Plan Year Timeline**
- **Appendix**
  - Forecast Assumptions
  - Contribution Rate Summary

2020 PPA Zone Status Certification - Review

2020 PPA Certification

- **On or before September 28, 2020 the Plan will be certified "Green Zone" for the plan year beginning July 1, 2020**
  - Emerged 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

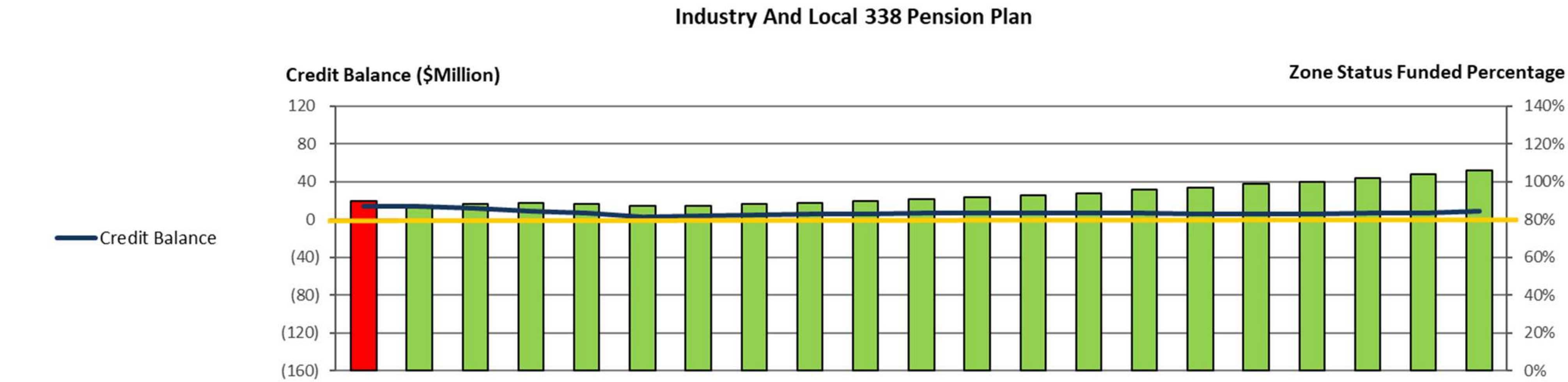
- **Basis of the certification:**
  - Preliminary Assets based on draft financial statements for the plan year ended June 30, 2020, prepared by the Plan's auditor
  - Projected liabilities based on results of the July 1, 2019 actuarial valuation, including a 7.25% discount rate
  - Projected Contributions
    - Only rate increases already included in CBAs as of the certification date are recognized
    - Reflects industry activity assumptions that are based on input from the Trustees

2020 PPA Certification (continued)

- **Projected Contributions: Contribution Rates**
  - Settled Contracts that include the Preferred Schedule of the RP or the terms of the Funding Policy
    - HP Hood, LaFargeville, CBA term 11/1/2017 – 10/31/2020
    - LP Transportation, CBA term 8/16/2019 – 8/15/2022 (Funding Policy)
    - 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
- **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 has been based on prior year's work levels, excluding known withdrawn employers

PPA Zone Certification: July 1, 2020 – June 30, 2021 Plan Year

1.82% Return PYB 2019; 7.25% Return PYB 2020+ | 10,000 Weeks Worked beginning PYB 2020 |
Current CBA Contribution Increases only



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 (%)	4.81	1.82	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)	11.9	10.3	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
(3) Weekly Contribution Rate ($)	274	303	314	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319	319
(4) Contributions+EWL Payments($M)	3.4	5.6	3.1	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 ($M)	93	93	94	94	93	92	92	92	93	93	94	94	95	95	96	97	97	98	99	100	101
(6) Zone Status Liability ($M)	102	106	106	106	106	105	105	104	104	103	102	102	101	100	100	99	98	97	96	96	95
(7) Credit Balance ($M)	14	14	12	9	6	3	4	5	6	6	7	7	6	7	7	6	6	6	6	7	9
(8) Zone Status Funded Percentage	90%	87%	88%	89%	88%	87%	87%	88%	89%	90%	91%	92%	93%	94%	96%	97%	99%	100%	102%	104%	106%

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.

Observations

- **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 Funding Policy may be required to keep the Plan well funded in the long term.
- **The recently adopted Funding Policy helps mitigate some of the risk due to investment return**
  - Contracts adopted on or after October 15, 2019 must comply with the Plan's Funding Policy, requiring contribution rate increases as follows:

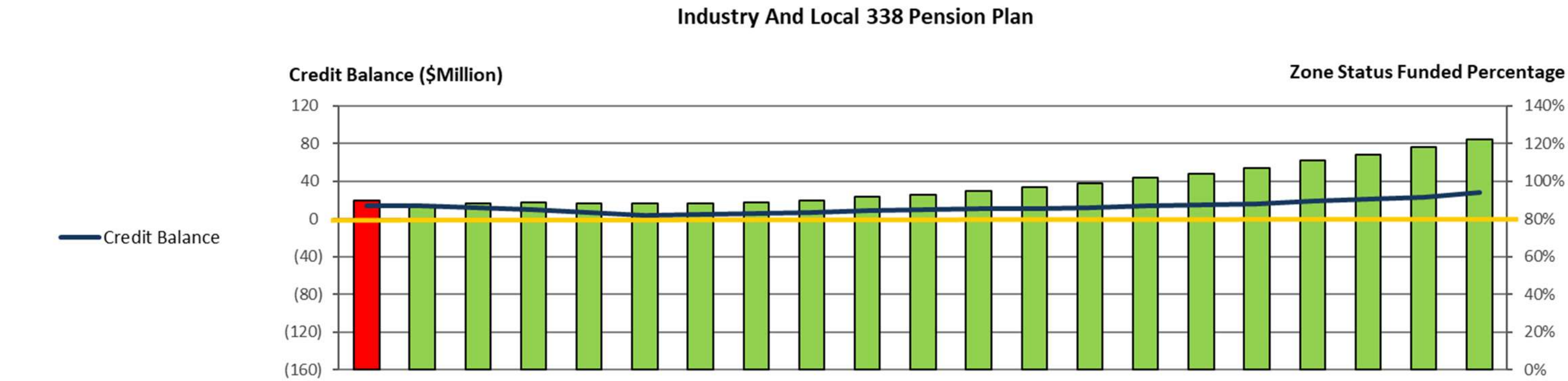
First 10 Years of Contribution Rate Increases

Year 1	$	8.76 per week	Year 6	$	10.16 per week
Year 2	$	9.02 per week	Year 7	$	10.46 per week
Year 3	$	9.29 per week	Year 8	$	10.77 per week
Year 4	$	9.57 per week	Year 9	$	11.10 per week
Year 5	$	9.86 per week	Year 10	$	11.43 per week

Contribution rate requirements for Year 11 and beyond will be provided by the Trustees.

Funding Policy Reflected

1.82% Return PYB 2019; 7.25% Return PYB 2020+ | 10,000 Weeks Worked beginning PYB 2020 |
Contribution Increases required by the Funding Policy



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 (%)	4.81	1.82	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)	11.9	10.3	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
(3) Weekly Contribution Rate ($)	274	303	317	328	337	346	356	366	376	387	397	409	420	432	444	457	470	483	497	511	526
(4) Contributions+EWL Payments($M)	3.4	5.6	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9	4.0	4.1	4.2	4.3	4.4	4.6	4.7	4.8	5.0	5.1	5.3
(5) Actuarial Value of Assets ($M)	93	93	94	94	94	93	92	93	94	95	97	98	100	102	104	107	110	113	117	121	126
(6) Zone Status Liability ($M)	102	106	106	106	106	105	105	104	104	104	103	103	103	102	102	102	102	102	102	102	103
(7) Credit Balance ($M)	14	14	12	10	7	4	5	6	7	9	10	11	11	12	14	15	16	19	21	24	28
(8) Zone Status Funded Percentage	90%	87%	88%	89%	88%	88%	88%	89%	90%	92%	93%	95%	97%	99%	102%	104%	107%	111%	114%	118%	122%

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.

Projection Roadmap 7.25% Discount Rate

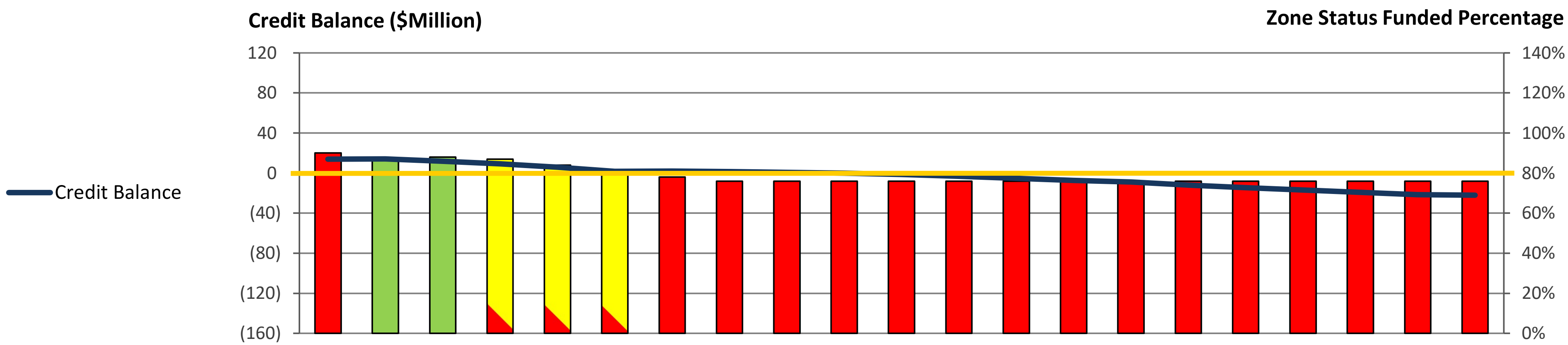
Scenario	Investment Return PYB 2019 / PYB 2020 / PYB 2021+	Weeks Worked PYE 2019 / PYE 2020+	Projected 6/30/2021 Market Value of Assets	Projected Zone Status 2021-2022	Projected Status Reflecting the Funding Policy
Certification Basis: Contribution Rates Included in Current Collective Bargaining Agreements					
Baseline July 1, 2020 PPA Certification	1.82% / 7.25% / 7.25%	10,300 / 10,000	$90.5M	Green	Funding Policy (3%/year) provides increasing F%, F% = 122% 7/1/2038
2021 Basis: Anticipated Contribution Rates Negotiated in Upcoming Collective Bargaining Agreements 7/2020-6/2021					
A Low ROA That Results in Non-Green 2021	1.82% / -4.00% / 7.25%	10,300 / 10,000	$80.8M	Yellow	Funding Policy (3%/year) provides increasing F%, 7/1/2038 **Red** F% = 90%
B High ROA For 2020-2021	1.82% / 14.50% 7.25%	10,300 / 10,000	$96.9M	Green	Funding Policy (3%/year) provides increasing F%, 7/1/2038 **Green** F% = 142%

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 A – Low Return on Assets

1.82% Return PYB 2019; -4.00% Return PYB 2020; 7.25% Return PYB 2021+ | 10,000 Weeks Worked beginning PYB 2020 | Anticipated Contribution Increases Bargained During the PYB 2020

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 (%)	4.81	1.82	(4.00)	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)	11.9	10.3	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
(3) Weekly Contribution Rate ($)	274	303	315	324	332	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335
(4) Contributions+EWL Payments($M)	3.4	5.6	3.2	3.2	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
(5) Actuarial Value of Assets ($M)	93	93	94	92	89	85	82	80	80	79	79	78	78	78	77	77	76	76	75	75	74
(6) Zone Status Liability ($M)	102	106	106	106	106	105	105	104	104	103	103	102	102	101	100	100	99	98	98	97	96
(7) Credit Balance ($M)	14	14	12	9	6	2	2	2	1	(0)	(1)	(3)	(5)	(7)	(9)	(12)	(14)	(17)	(19)	(21)	(22)
(8) Zone Status Funded Percentage	90%	87%	88%	87%	84%	81%	78%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%

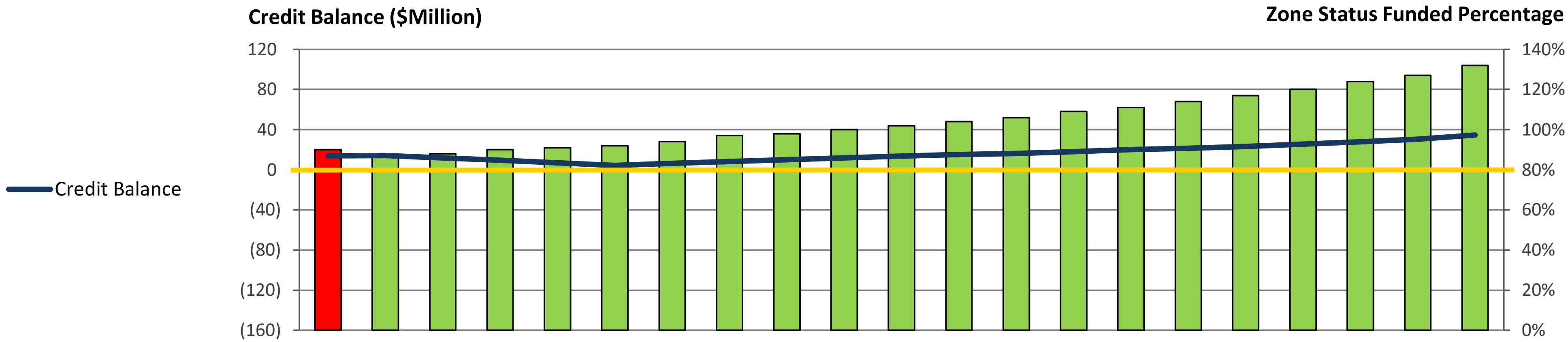
Notes

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 B – High Return on Assets

1.82% Return PYB 2019; 14.50% Return PYB 2020; 7.25% Return PYB 2021+ | 10,000 Weeks Worked beginning PYB 2020 | Anticipated Contribution Increases Bargained During the PYB 2020

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 (%)	4.81	1.82	14.50	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)	11.9	10.3	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
(3) Weekly Contribution Rate ($)	274	303	315	324	332	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335	335
(4) Contributions+EWL Payments($M)	3.4	5.6	3.2	3.2	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
(5) Actuarial Value of Assets ($M)	93	93	94	96	97	97	99	101	102	104	105	107	108	110	112	114	116	119	121	124	127
(6) Zone Status Liability ($M)	102	106	106	106	106	105	105	104	104	103	103	102	102	101	100	100	99	98	98	97	96
(7) Credit Balance ($M)	14	14	12	10	7	5	6	8	10	12	14	15	16	18	20	21	23	26	28	30	35
(8) Zone Status Funded Percentage	90%	87%	88%	90%	91%	92%	94%	97%	98%	100%	102%	104%	106%	109%	111%	114%	117%	120%	124%	127%	132%

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.

2020 – 2021 Plan Year Timeline

2020 – 2021 Plan Year Timeline – PPA

Event	Deadline / Information	Latest Date
Actuarial Certification	90 days into plan year	Complete 9/28/2020
Notice of Critical Status (if applicable)	30 days after actuarial certification	N/A after Plan was Certified "Green" 7/1/2019
Review and Update Rehabilitation Plan (if applicable)	Rehabilitation Plan adopted 9/18/2017; Review annually during the Rehabilitation Period	N/A after Plan was Certified "Green" 7/1/2019
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	N/A after Plan was Certified "Green" 7/1/2019

2020 – 2021 Plan Year – Other Actuarial Information

Event	Deadline / Information	Latest Date
Annual Funding Notice	120 days after the end of the plan year	10/28/2020
Schedule MB (Form 5500)	Last day of the 7th month following the end of the Plan Year (2½ month extension available)	1/31/2021 (w/o ext) 4/15/2021 (with ext)
ERISA 104(d) Notice	30 days after due date Form 5500 filing	3/2/2021 (w/o ext) 5/15/2020 (with ext)
PBGC Premium Filing	15th day of the 10th full calendar month in the Plan Year	4/15/2021
Actuarial Valuation	Data received, work in progress	N/A
Review of Actuarial Assumptions	In conjunction with the actuarial valuation	N/A

Appendix

Data, Assumptions, Methods and Provisions

- **Please refer to the Horizon Actuarial Services July 1, 2019 Actuarial Valuation Report for more detail.**

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, 2019 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
    - 1.82% return on assets for the plan year ending June 30, 2020
    - 7.25% per year, net of investment-related expenses, thereafter
  - Operating Expenses: $375,000 for the plan year beginning July 1, 2019, increasing 2.5% 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 Assumptions and Methods (cont.)

- **Work Levels**
  - Plan year beginning July 1, 2019 – 10,300 total weeks, unless otherwise noted
  - Each plan year beginning July 1, 2020 - 10,000 total weeks, unless otherwise noted
    - 49 weeks per active for 204 active participants (average for 7/1/2019 – 4/30/2020)

- **Contribution Rates**
  - All contribution rate increases are benefit-bearing
  - Contracts adopted on or after October 15, 2019 must comply with the Plan's Funding Policy, requiring contribution rate increases as follows:

First 10 Years of Contribution Rate Increases

Year 1	$	8.76 per week	Year 6	$	10.16 per week
Year 2	$	9.02 per week	Year 7	$	10.46 per week
Year 3	$	9.29 per week	Year 8	$	10.77 per week
Year 4	$	9.57 per week	Year 9	$	11.10 per week
Year 5	$	9.86 per week	Year 10	$	11.43 per week

Contribution rate requirements for Year 11 and beyond will be provided by the Trustees.

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.

Historical Contribution Rates by Contract

Employer	Base Rate	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
					As of Plan Year Ending						
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
HP Hood 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

Plan History Under PPA

Plan Year Begins	Contribution Requirements	Benefit Changes
7/1/2008 - 7/1/2009 Green	**7/1/2009 supplemental contribution requirement** • Contrib increase requirements were updated periodically	**7/1/2009 supplemental contribution requirement** • Supplemental contributions were not benefit bearing
7/1/2010 - 7/1/2015 Green	N/A	N/A
7/1/2016 Yellow, Proj Red w/in 5 years	**Funding Improvement Plan (FIP), adopted 5/22/2017** • Flat dollar schedule of contribution increases • Rehabilitation Plan was adopted before any contract was required to include the terms of the FIP	**Amendment Effective 7/1/2016** • Benefit accruals are 0.9% of contributions • All contributions are benefit bearing
7/1/2017 Red	**Rehabilitation Plan (RP), adopted 9/18/2017** • Flat dollar schedule of contribution increases equivalent to 6.5% of the average contribution rate in effect July 1, 2017 • Surcharges and the default schedule were imposed on open contracts after 180 days	**Adjustable Benefits eliminated, effective 1/1/2018** • 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
7/1/2018 Red	N/A	N/A
7/1/2019 Green	**Funding Policy, adopted 10/15/2019** Flat dollar schedule of contribution increases equivalent to 3.0% of the average contribution rate in effect July 1, 2017	N/A

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, ASA, EA, MAAA
Consulting Actuary