



Industry & Local 338 Pension Plan

**July 1, 2017 PPA Certification
and Actuarial Update**

June 5, 2017

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Today's Discussion

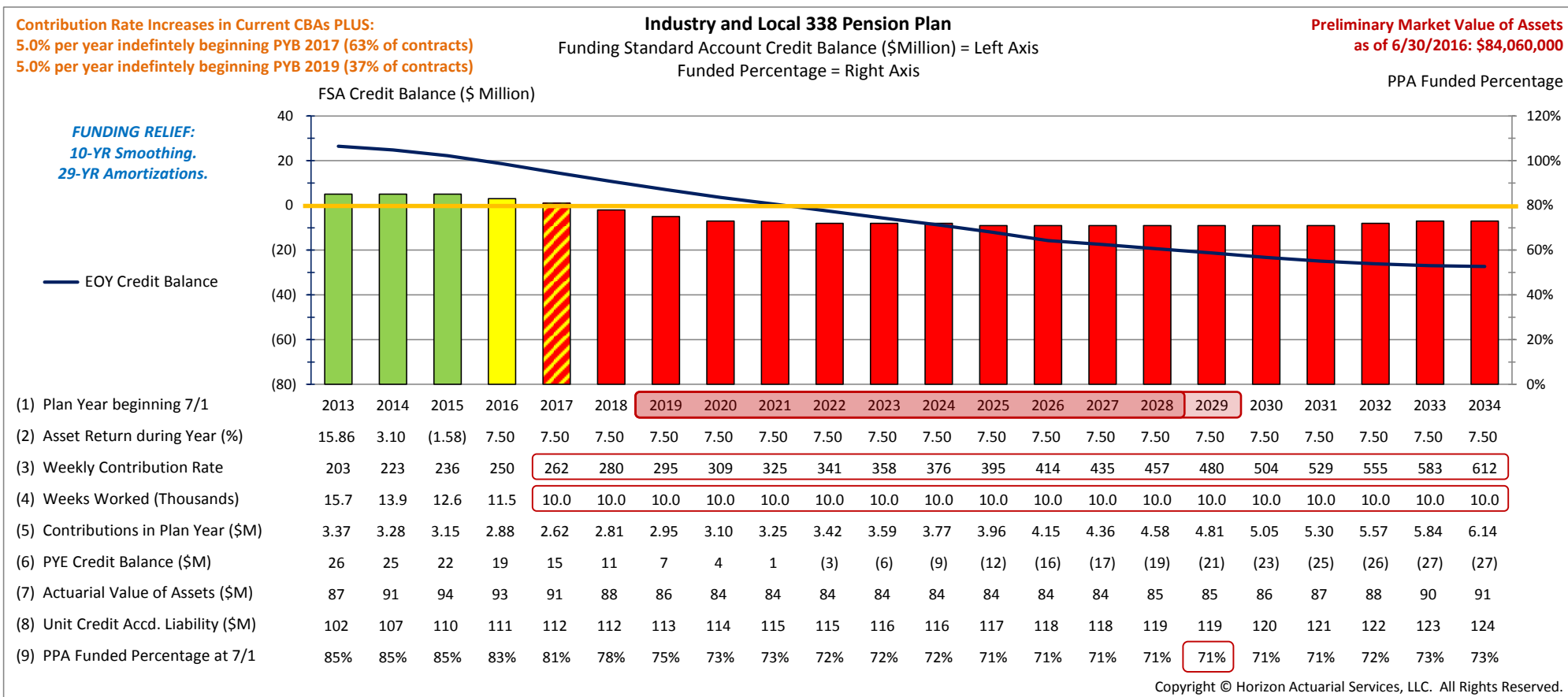
- **Funding Improvement Plan**
- **2017 PPA Zone Status Certification**
- **Rehabilitation Plan**
- **Appendix**
 - Contribution Rate Summaries
 - Benefit Examples
 - Supplemental Endangered and Critical Status Information
 - Projection Assumptions and Methods

Funding Improvement Plan (FIP)

Baseline: 7/1/2016 Valuation Projection

0.9% of Contributions Formula

-1.58% Asset Return in PYB 2015 | 7.50% Return PYB 2016+ | 10.0 Thousand Weeks Worked beginning PYB 2017 |
Current CBA Contribution Increases PLUS Perpetual 5.0% Annual Contribution Rate Increases¹



Notes:

1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.

FIP Design

■ FIP Goal

- The Plan's underfunding improves by one-third by the end of the 10-year Funding Improvement Period
 - **Roughly 83% + (100% - 83%) / 3 = 89% by June 30, 2029**
- Credit Balance may not be negative in the last year of the Funding Improvement Period
 - Excise taxes may be imposed if there is a negative credit balance during the Funding Improvement Period

■ FIP design based on March 30 agreement:

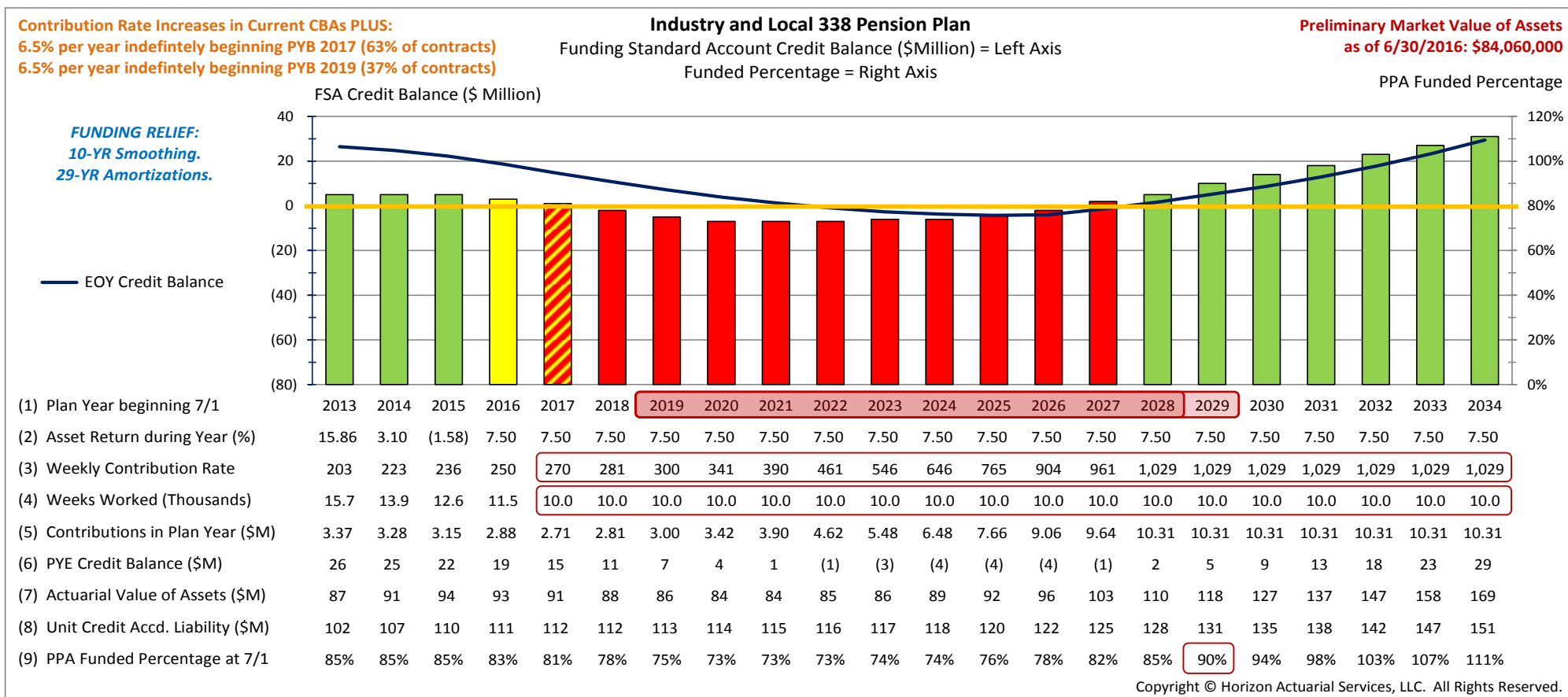
- Contribution increases of 6.50% per year for 3 years then 18.0% per year for 7 years, compounded
 - % Contributions increases to be converted to flat \$, same for all contracts
- No change to benefit provisions
- Preferred Schedule based on Scenario 2 presented at March 30, 2017 Board Meeting:
 - Increases of 5.0% per year for 3 years then 18.0% per year, compounded
 - Adjusted so that increases for initial 3 years to match expected rehabilitation plan requirement of 6.50% per year

Scenario 1: Contribution Only FIP

0.9% of Contributions Formula

7.50% Return PYB 2016 and thereafter | 10.0 Thousand Weeks Worked beginning PYB 2017 |

Current CBA Contribution Increases PLUS **6.5% for 3 years + 18.0% for 7 years¹**



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.

FIP Design

	<u>Preferred Schedule</u>	<u>Default Schedule</u>
<i>Rate of Future Benefit Accruals</i>	0.90% of contributions	0.00% of contributions, effective for Pension Credits earned on and after 7/1/2018
<i>Contribution Rate Increases</i>		
Year 1	\$ 17.55 per week	\$ 35.10 per week
Year 2	\$ 18.69 per week	\$ 37.38 per week
Year 3	\$ 19.91 per week	\$ 39.82 per week
Year 4	\$ 58.71 per week	\$ 29.36 per week
Year 5	\$ 69.27 per week	\$ 34.64 per week
Year 6	\$ 81.74 per week	\$ 40.87 per week
Year 7	\$ 96.46 per week	\$ 48.23 per week
Year 8	\$ 113.82 per week	\$ 56.91 per week
Year 9	\$ 134.31 per week	\$ 67.16 per week
Year 10	\$ 158.48 per week	\$ 79.24 per week

All CBAs adopted on or after the date of the Funding Improvement Plan must include terms consistent with the requirements of one of the above two Schedules.

For each CBA, Year 1 is deemed to begin on the effective date of the first such CBA adopted on or after the date of this Funding Improvement Plan and each following year is deemed to begin on the anniversary of Year 1.

The benefits, rights, and features – other than the rate of future benefit accruals – are the same under the Preferred Schedule and the Default Schedule.

FIP Design

Employer	Employer #	Current Contracts			FIP Preferred Schedule – Year 1		
		Effective Date	Expiration Date	Contribution Rate	Effective Date	Increase	Total Rate
College of New Rochelle	9	9/1/2009	8/31/2013	\$ 174.00	7/1/2017	\$ 17.55	\$ 191.55
Crowley LaFargeville	13	11/1/2014	10/31/2017	\$ 286.43	11/1/2017	\$ 17.55	\$ 303.98
Westchester Local 860	21	10/1/2009	9/30/2013	\$ 205.21	7/1/2017	\$ 17.55	\$ 222.76
Freisland Campina	25	1/1/2016	12/31/2018	\$ 225.09	1/1/2019	\$ 17.55	\$ 242.64
L.P. Transportation	43	8/16/2016	8/15/2019	\$ 290.80	8/16/2019	\$ 17.55	\$ 308.35
Montefiore New Rochelle	50	2/26/2013	2/25/2017	\$ 234.06	7/1/2017	\$ 17.55	\$ 251.61
Paraco Gas Corp.	54	2/1/2015	12/31/2018	\$ 227.60	1/1/2019	\$ 17.55	\$ 245.15
Culinart, Inc.	60	1/1/2014	12/31/2016	\$ 226.91	7/1/2017	\$ 17.55	\$ 244.46

2016 – 2017 Plan Year Timeline

Requirement	Description	Deadline
2016 PPA Certification	90 days into plan year (Endangered); Critical Status projected within 5 years	Complete 9/28/2016
2016 Notice of Endangered Status	30 days after actuarial certification of zone status	Complete 10/28/2016
Imposition of Surcharges (Critical Status only)	30 days after notice of surcharge is sent to employers (may be later than certification notice)	N/A
Adoption of Funding Improvement Plan	240 days after due date for actuarial certification	Complete 5/25/2017
Send FIP Schedules to Bargaining Parties	30 days after adoption of FIP	6/24/2017
Funding Improvement Period Begins	After expiration of contracts covering at least 75% of active participants, not later than first of plan year following second anniversary of adoption of FIP	7/1/2019
Effective Date of Benefit Changes	FIP Default Schedule: Only non-411(d)(6) protected benefit changes can be made: Future benefit accruals and ancillary benefits	TBD

2017 PPA Zone Status Certification

PPA Certification Zone Statuses

Critical

In general, a projected funding deficiency in the next 4 or 5 years (other factors may apply)

Critical and Declining (NEW)

In critical status, and projected to go insolvent within the 20 years (15 years in some cases)

Endangered*

Under 80% funded or a projected funding deficiency in the next 7 years

Seriously Endangered

Under 80% funded and a projected funding deficiency in the next 7 years

“Green Zone”

(none of the above)

New special rules, effective after 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.*

2017 PPA Certification

- **Certification must be submitted by the 90th day of the Plan Year**
 - September 28, 2017
 - Deadlines for certain actions/notices accelerated if certification submitted early
 - Election to be in Critical Status (Early)
 - Notice of Critical Status Election or Projection
 - 2017 Notice of Critical Status
- **Preliminary Assets**
 - 12.0% return on assets for the plan year ending June 30, 2016
 - Based on estimated return on investments provided by SEI, adjusted for non-invested assets
- **Projected liabilities**
 - Based on results of the July 1, 2016 actuarial valuation
 - Plan changes known at the time of certification should be reflected
 - No changes have been made that are not reflected in the July 1, 2016 actuarial valuation

2017 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 assumptions are very important for most multiemployer plans, in that they directly affect the level of the contributions expected in future years
 - Assumption is often based on prior year's work levels or contributions
- Only rate increases already included in CBAs as of the certification date are recognized
 - Assumes no contracts have adopted the FIP as of the certification date

2017 PPA Certification: Industry Activity

Plan Year	Active Count	Average Hours Worked per Active	Average Ultimate Contribution Rate
7/1/2017 – 6/30/2018	?	?	?
7/1/2016 – 6/30/2017	243	1,900	\$ 6.24
7/1/2015 – 6/30/2016	265	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	?

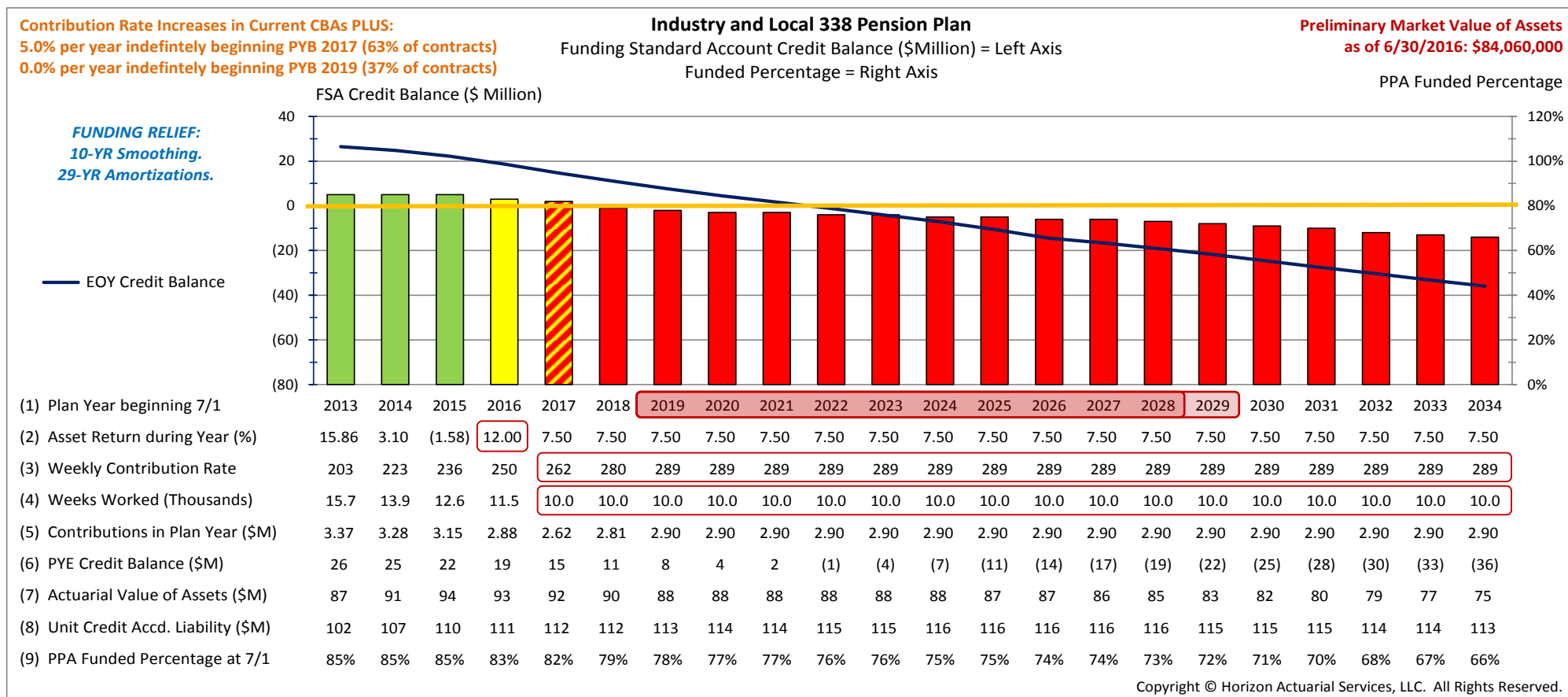
Historical contribution information for plan years prior to 7/1/2015 – 6/30/2016 obtained from prior years' actuarial valuation reports.

Scenario 2: PPA Certification Basis

0.9% of Contributions Formula

12% Asset Return in PYB 2016 | 7.50% Return PYB 2017+ | 10.0 Thousand Weeks Worked beginning PYB 2017 |

Current CBA Contribution Increases¹



Notes

1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.

Rehabilitation Plan

Critical Status: Rehabilitation Plan (RP)

■ Rehabilitation Plan

- Must be adopted by Trustees within 240 days after due date of certification of Critical Status
- Trustees present the bargaining parties with one or more schedules of contribution increases and cuts in future benefit accruals, as needed to achieve the RP goals
 - RP Goals:
 - Benefit changes and contribution increases such that the Plan is expected to emerge from Critical Status by the end of the 10-year Rehabilitation Period
 - **Positive Credit Balance projected for current and 9 additional years**
 - Credit Balance may be negative during the Rehabilitation Period
 - Protection from excise tax as long as the Plan is making progress under the terms of the RP
 - Alternatively, declare “All Reasonable Measures”
 - Schedules include:
 - One schedule with reductions in the adjustable benefits before contribution increases are required. Future benefit accruals can be reduced to the lower of 1% of contributions or the current accrual rate (Default Schedule)
 - Alternative schedules with other benefit and contribution changes

RP: Preliminary Design

March 30 Meeting

- **Contribution Rate Increases of 6.5% per year (flat dollar equivalent)**
- **Benefit Changes**
 - Terminated Vested Participants: Eliminate Adjustable Benefits
 - Active Participants: 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
 - 30-Day Notice Required

RP: Early Retirement Change Illustration

May 5 Memo

Please note the sole purpose of this exhibit is to illustrate the effect of the various applicable early retirement reduction factors. The benefit amounts below do not necessarily reflect benefits that might actually be payable under the Plan formula for the service amounts and retirement types shown.

Age at Retirement	Current Plan					Proposed Rehabilitation Plan	
	Early Retirement	20-Year Service Pension	25-Year Service Pension	30-Year Service Pension	35-Year Service Pension	Early Retirement	Any Service Pension
50	Not Eligible	\$ 500.00	\$ 900.00	\$ 950.00	\$ 1,000.00	Not Eligible	\$ 228.69
51	Not Eligible	500.00	900.00	950.00	1,000.00	Not Eligible	249.39
52	Not Eligible	500.00	900.00	950.00	1,000.00	Not Eligible	272.29
53	Not Eligible	500.00	900.00	950.00	1,000.00	Not Eligible	297.68
54	Not Eligible	500.00	900.00	950.00	1,000.00	Not Eligible	325.89
55	\$ 400.00	500.00	900.00	950.00	1,000.00	\$ 357.30	357.30
56	460.00	500.00	900.00	950.00	1,000.00	392.35	392.35
57	520.00	520.00	900.00	950.00	1,000.00	431.57	431.57
58	580.00	580.00	900.00	950.00	1,000.00	475.57	475.57
59	640.00	640.00	900.00	950.00	1,000.00	525.08	525.08
60	700.00	700.00	900.00	950.00	1,000.00	580.96	580.96
61	760.00	760.00	900.00	950.00	1,000.00	644.25	644.25
62	820.00	820.00	900.00	950.00	1,000.00	716.16	716.16
63	880.00	880.00	900.00	950.00	1,000.00	798.17	798.17
64	940.00	940.00	940.00	950.00	1,000.00	892.06	892.06
65	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00	1,000.00

The hypothetical monthly benefit amounts shown above are for illustration purposes only, and assume:

- 1) "Current Plan" benefits payable as Life Annuity with 120-month guarantee.
- 2) "Proposed Rehabilitation Plan" benefits payable as Single Life Annuity.
- 3) All benefits earned on or after July 1, 2010 and subject to 6% per year early retirement reduction factors.

Including the FIP / RP in Contracts

Projection Assumptions

Contributing Employer	7/1/2016 Active Count	7/1/2016 TV Count	Next Contract Start Date	Estimated RP Schedule Adoption	Assumed Adj. Benefit Changes	Surcharges Assumed in 2017-2018 Plan Year
College New Rochelle	13	8	9/1/2013	12/2017	7/2018	None
Crowley LaFargeville	100	52	11/1/2017	12/2017	7/2018	None
Culinart	19	1	1/1/2017	12/2017	7/2018	None
Freisland	63	23	1/1/2019	12/2018	7/2019	7 months
LP Transport	27	13	8/16/2019	8/2019	7/2020	7 months
Montefiore New Rochelle	12	6	2/26/2017	12/2017	7/2018	None
Paraco Gas	8	3	2/1/2018	1/2018	7/2018	2 months
Westchester L860	1	1	10/1/2013	12/2017	7/2018	None
All Other	N/A	140	N/A			
	243	247				

Assumption: Elect Early Critical Status at July 1, 2017

7/1/2016 - 6/30/2017 Plan Year

Endangered Status Certification	9/28/2016
Notice of Endangered Status	10/28/2016
Adopt FIP	5/25/2017
FIP to Bargaining Parties	6/24/2017
Funding Improvement Period Begins	7/1/2019
Effective Date of Benefit Changes	TBD

7/1/2017 - 6/30/2018 Plan Year

Endangered/Critical Status Certification	9/28/2017
Election of Critical Status	10/28/2017
Notice of Critical Status	10/28/2017
Imposition of Surcharges	11/28/2017
Adopt RP	10/28/2017
RP to Bargaining Parties	11/28/2017
Rehabilitation Period Begins	7/1/2020
Effective Date of Benefit Changes	TBD

Factors Considered in Developing the RP

- **Timing**

- 2017/2018: Rehabilitation Plan
 - Adopt early in the plan year, 10/2017; Provide to bargaining parties 11/2017
 - Could adopt earlier

- **Future Investment Earnings**

- 12.0% return on assets for the plan year ending June 30, 2016 [Updated]
 - Based on estimated return on investments provided by SEI, adjusted for non-invested assets
- 7.50% per year, net of investment-related expenses, thereafter

- **Future Work Levels**

- 11,500 weeks in 2016/2017; 10,000 weeks each plan year thereafter

- **Benefit Cuts – March 30 Agreement**

- Rehabilitation Plan: Adjustable benefits – Subsidies on accrued benefits
 - Terminated vested participants
 - Active participants

- **Contribution Increases – March 30 Estimate**

- 6.5% per year, compounded
- Flat dollar amount applied to all contracts, by year

Projection Assumptions

- **All scenarios assume:**

- Contribution rate increases begin following CBA expiration dates.
 - 37% of hours worked under 3-year contracts beginning in 2017 (Paraco & LaFargeville)
 - 63% of hours worked under 3-year contracts beginning in 2016 (All Other Employers)
- All contribution rate increases are benefit-bearing.
- All contribution rate increases are compounded.
- Improvement Periods:
 - Funding Improvement Period: 7/1/2019 – 6/30/2029
 - Rehabilitation Period: 7/1/2020 – 6/30/2030
- No assumption changes to account for possible changes to participant behavior due to proposed benefit changes.
- No changes to valuation methods / no amortization extensions.

See Slide 41 for additional information regarding projection assumptions and methods.

Projection Roadmap: RP Design

Scenario	Contribution Requirement	Benefit Change ¹	Investment Return	Weeks Worked	RP Requires Emergence 7/1/2030			
			PYE 2017 / PYE 2018	Each year PYE 2018+	Emerge	EOY FSA Balance	% Funded 7/1/2030	Wkly Contrib Rate 7/1/2030
Baseline	5.0% per year	No Change	7.50% / 7.50%	10,000	No	(\$23M)	71%	\$504
1 FIP	6.5% per year 3 years, 18.0% per year 7 years	No Change	7.50% / 7.50%	10,000	2028	\$9M	94%	\$1,029
Rehabilitation Plan								
3 Asmp ROA PYE 2017	6.5% per year	Eliminate All Adjustable Benefits	7.50% / 7.50%	10,000	2029	\$2M	89%	\$606
4 Est ROA PYE 2017	6.5% per year	Eliminate All Adjustable Benefits	12.00% / 7.50%	10,000	2020	\$11M	99%	\$606
5 Low ROA PYE 2018	6.5% per year	Eliminate All Adjustable Benefits	12.00% / 0.00%	10,000	2032	(\$3M)	84%	\$606
6 High Work PYE 2017+	6.5% per year	Eliminate All Adjustable Benefits	12.00% / 7.50%	11,500	2020	\$20M	106%	\$606
7 Low Work PYE 2018+	6.5% per year	Eliminate All Adjustable Benefits	12.00% / 7.50%	8,500	2029	\$2M	91%	\$606

Notes

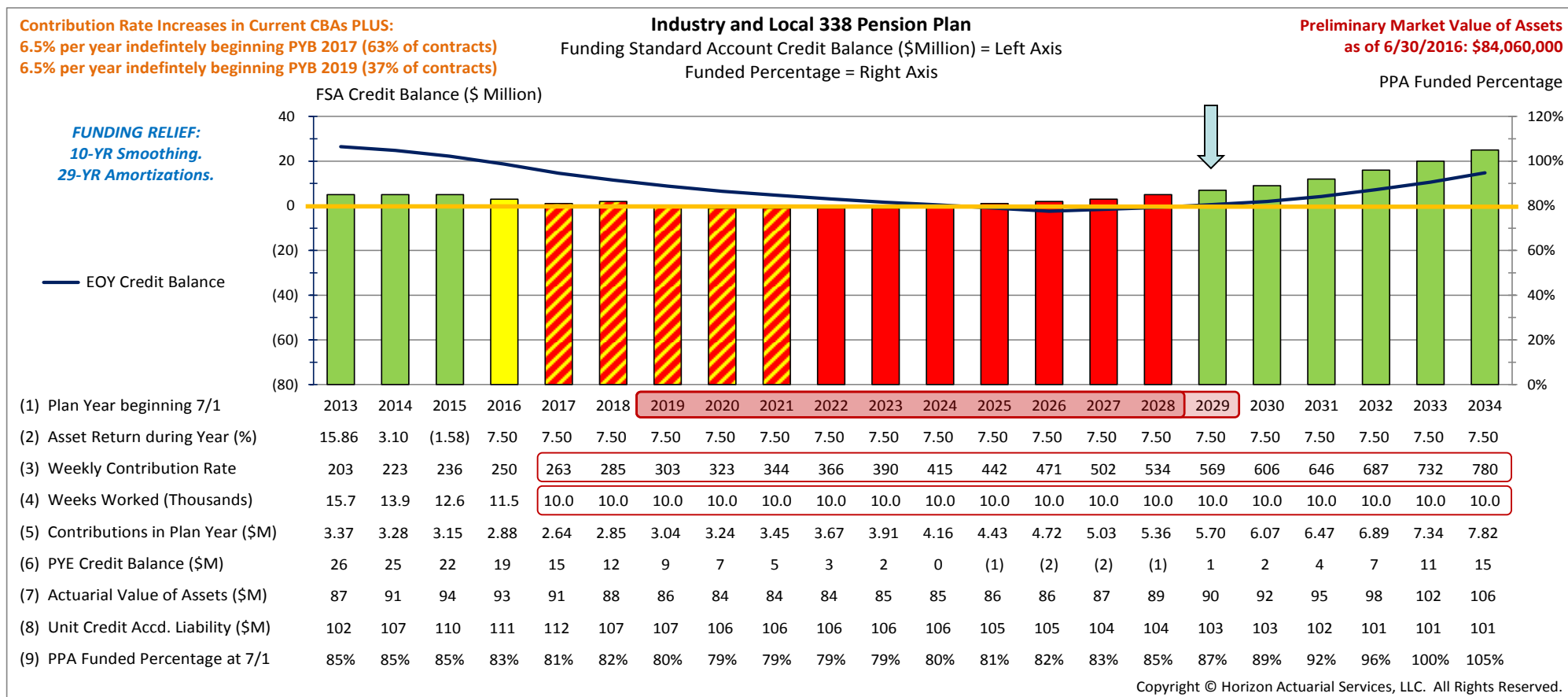
- 1) Actual benefit change effective dates may vary by contract, but generally assumed to be effective July 1, 2018.
- 2) Average weekly contribution rate effective 7/1/2016 is \$250.

Scenario 3: RP Eliminates All Adjustable Benefits

0.9% of Contributions Formula

7.50% Return in PYB 2016+ | 10.0 Thousand Weeks Worked beginning PYB 2017 |

Current CBA Contribution Increases PLUS **Perpetual 6.5% Annual Contribution Rate Increases¹**



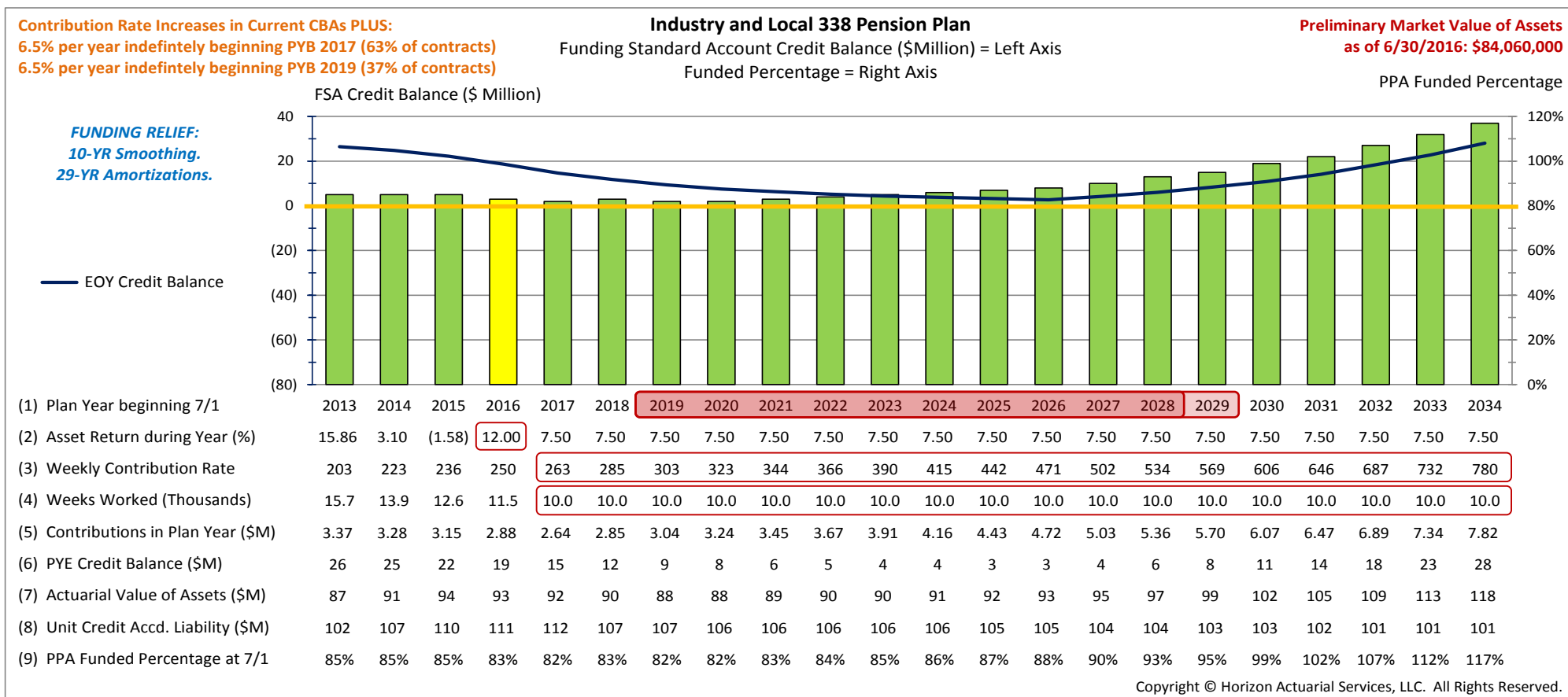
Notes

- 1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.
See graph for detail regarding assumed rate increases.

Scenario 4: RP Eliminates All Adjustable Benefits

0.9% of Contributions Formula

12% Asset Return in PYB 2016 | 7.50% Return PYB 2017+ | 10.0 Thousand Weeks Worked beginning PYB 2017 |
Current CBA Contribution Increases PLUS Perpetual 6.5% Annual Contribution Rate Increases¹



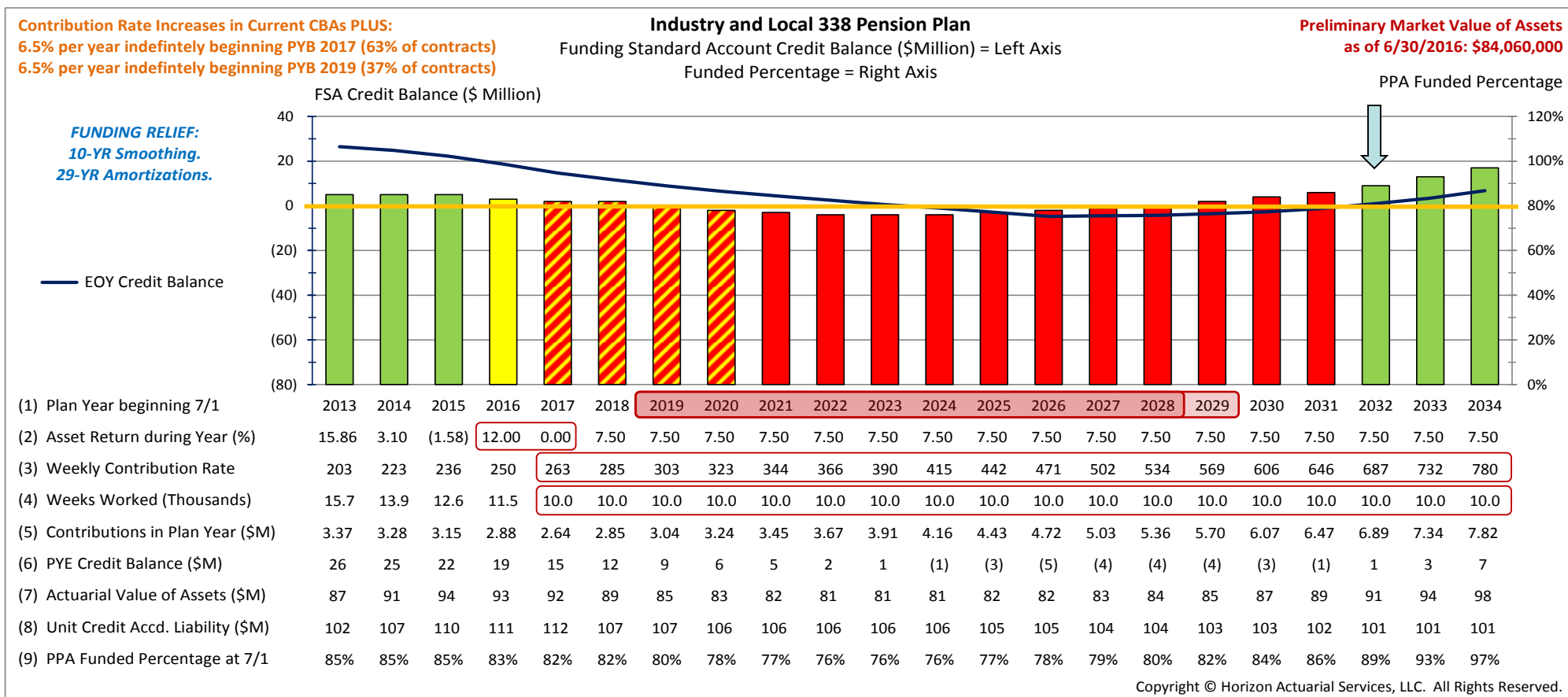
Notes

- Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.
See graph for detail regarding assumed rate increases.

Scenario 5: RP Eliminates All Adjustable Benefits

0.9% of Contributions Formula

12% Return in PYB 2016 | **0% Return in PYB 2017** | 7.50% Return thereafter | 10.0 Thousand Weeks Worked PYB 2017+ |
Current CBA Contribution Increases PLUS Perpetual 6.5% Annual Contribution Rate Increases



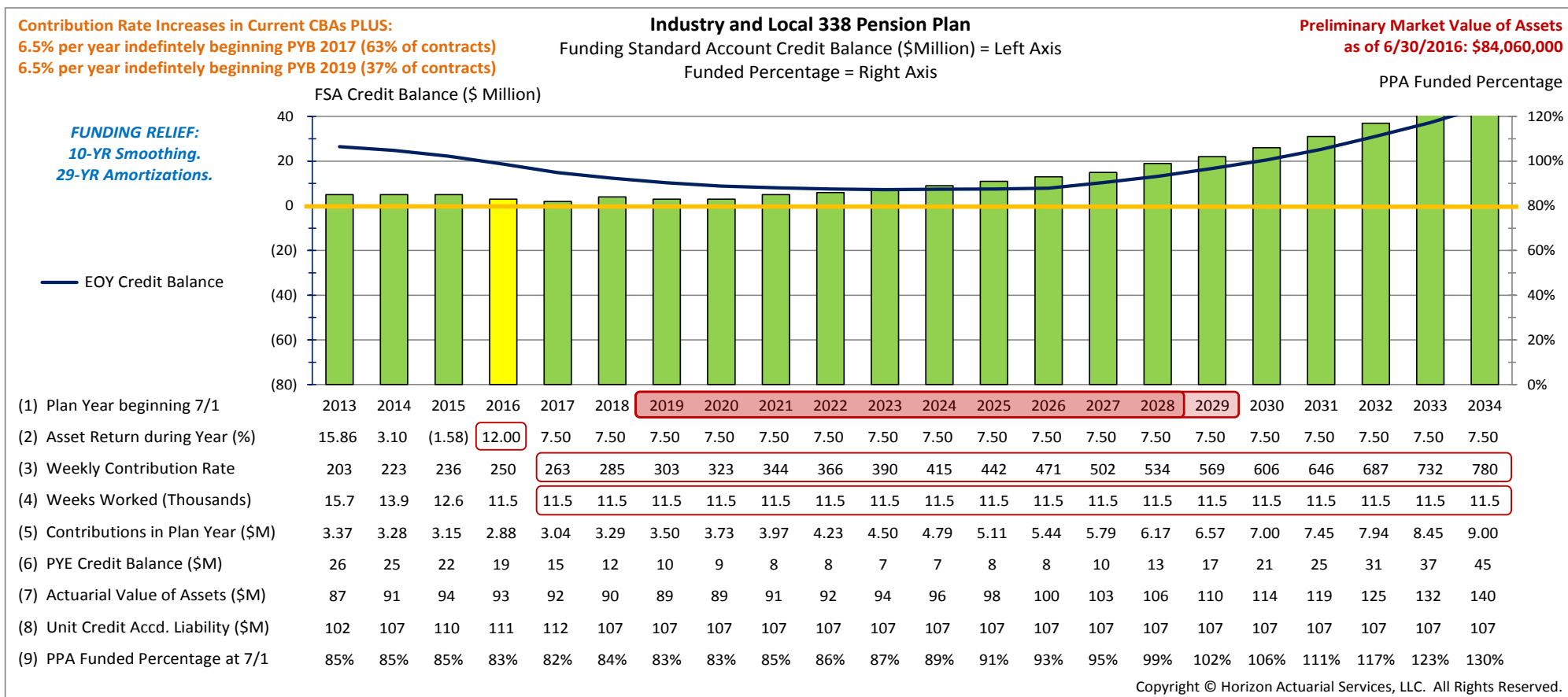
Notes

- Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.
See graph for detail regarding assumed rate increases.

Scenario 6: RP Eliminates All Adjustable Benefits

0.9% of Contributions Formula

12% Asset Return in PYB 2016 | 7.50% Return PYB 2017+ | **11.5 Thousand Weeks Worked beginning PYB 2017** |
Current CBA Contribution Increases PLUS Perpetual 6.5% Annual Contribution Rate Increases¹



Notes

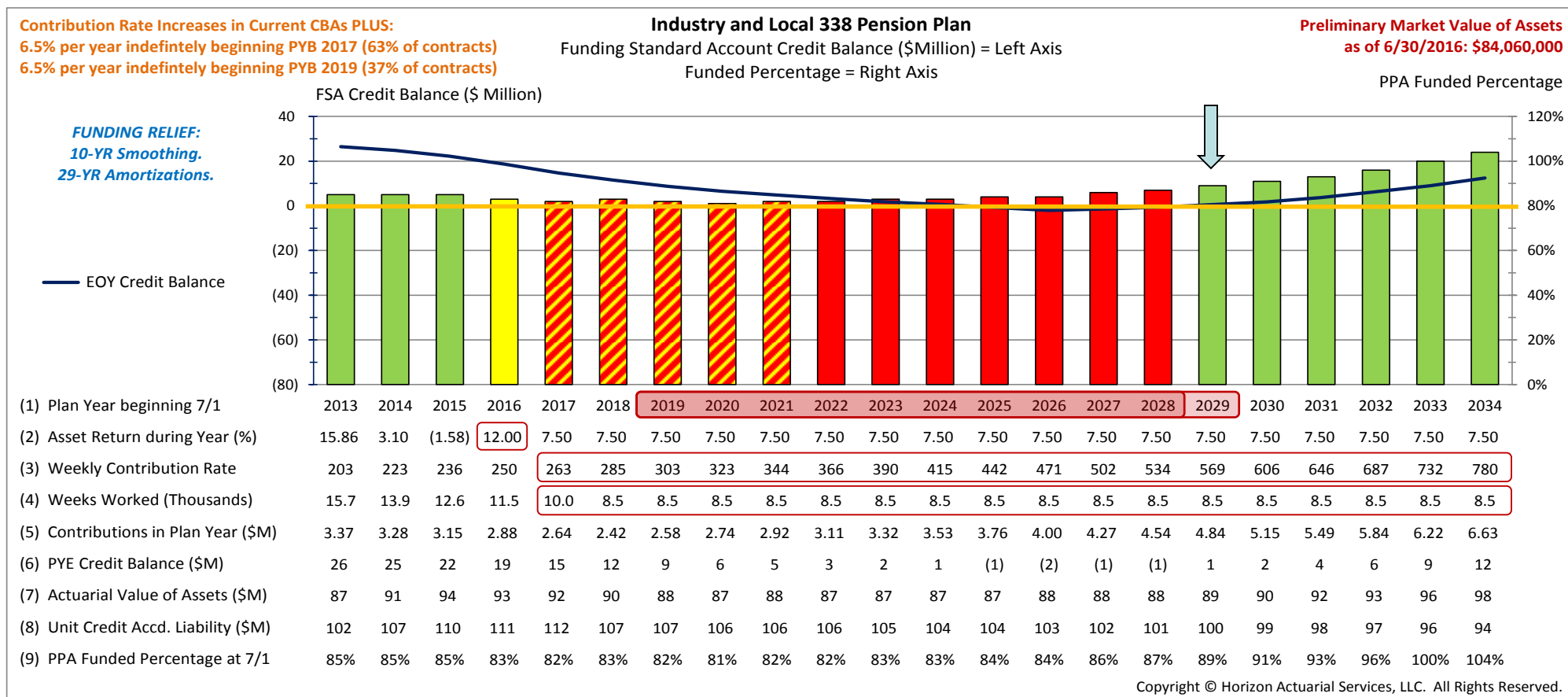
- Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.
See graph for detail regarding assumed rate increases.

Scenario 7: RP Eliminates All Adjustable Benefits

0.9% of Contributions Formula

12% Asset Return in PYB 2016 | 7.50% Return PYB 2017+ | **8.5 Thousand Weeks Worked beginning PYB 2018** |

Current CBA Contribution Increases PLUS Perpetual 6.5% Annual Contribution Rate Increases¹



Notes

- Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.
See graph for detail regarding assumed rate increases.

Next Steps

- **Funding Improvement Plan**
 - Prepare and Distribute Notice to Relevant Parties **(No later than June 24, 2017)**
- **PPA Zone Certification, Elections, and Notices**
 - Certification no later than September 28, 2017
 - Guidance on industry activity
 - Notice of Projected Critical Status
 - Election of Early Critical Status?
 - Adoption of Rehabilitation Plan
- **Rehabilitation Plan**
 - Finalize Design
 - Benefit changes
 - Future contribution rate increases

2017 – 2018 Plan Year Timeline

Requirement	Description	Target	Deadline
2017 PPA Certification	Certification 90 days into plan year; Projected to be certified as Endangered; with Critical Status projected within 5 years	9/28/2017	9/28/2017
Election to be in Critical Status (Early)	If projected Critical within 5 years: Election to be made no later than 30 days after the Certification Date	10/28/2017 Critical	10/28/2017 (Optional)
Notice of Critical Status Election or Projection	30 days after actuarial certification of zone status	10/28/2017	10/28/2017
2017 Notice of Critical Status	30 days after actuarial certification of zone status	10/28/2017	10/28/2017
Imposition of Surcharges (Critical Status only)	30 days after notice of surcharge is sent to employers (may be later than certification notice)	11/28/2017	TBD
Adoption of Rehabilitation Plan	240 days after due date for actuarial certification	10/28/2017	Early as 5/25/2018
Send RP Schedules to Bargaining Parties	30 days after adoption of RP	11/28/2017	6/24/2018
Rehabilitation Period Begins	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	RP 7/1/2020	7/1/2019 (if FIP) 7/1/2020 (if RP)
Effective Date of Benefit Changes	Adjustable benefits may be eliminated for eligible participants	TV: 7/1/2017 Active: CBA Renewal	TBD

Appendix

Historical Contribution Rates by Contract

Employer	Base Rate	As of Plan Year Ending									2017 ÷ Base
		2009	2010	2011	2012	2013	2014	2015	2016	2017	
College of New Rochelle	\$ 110.44	\$ 118.44	\$ 130.40	\$ 143.60	\$ 158.00	\$ 174.00	\$ 174.00	\$ 174.00	\$ 174.00	\$ 174.00	158%
Crowley LaFargeville	130.00	140.00	154.00	169.00	186.34	204.97	225.47	248.00	272.79	286.43	220%
Culinart	108.44	116.44	128.08	141.08	154.98	170.48	187.53	206.28	226.91	226.91	209%
Freisland Campina	100.12	110.12	121.13	133.25	146.57	161.23	177.35	195.09	205.09	225.09	225%
LP Transport	160.00	160.00	160.00	176.00	192.00	208.00	228.80	251.60	276.80	290.80	182%
Montefiore New Rochelle	120.12	132.12	145.33	159.86	175.85	193.44	212.78	234.06	234.06	234.06	195%
Paraco Gas	124.00	132.00	140.00	148.00	156.00	172.00	188.00	206.80	227.60	227.60	184%
Westchester L860	130.15	140.15	154.17	169.59	186.55	205.21	205.21	205.21	205.21	205.21	158%

Notes

1. Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing.

Summary of Plan Provisions & Participant Eligibility

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)			
Service Pension	20 Pension Credits: benefit reduced by 50%	Subsidies	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: Actuarially reduced benefit, not less than \$400		133	N/A
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.		102	102
	For married participants, a 75% J&S Annuity with 120-month certain period.	Subsidy	141	141

Benefit Example – 30 Year Service

Early Retirement and Form of Payment Subsidy

		Partic Age	Spouse Age
DOB	10/22/1955		
Last Day Wkd	8/23/2016	60.83	58.92
Annuity Start Date	11/1/2016	61.00	59.08
Spouse DOB	9/2/1957		
Accrued Benefit	Pre 7/1/1997	338.110	
	Post 6/30/1997	2,361.57	1,656.98 to 7/1/2010
			704.59 after 7/1/2010
	Total	2,699.68	

30 year Service Pension

4 Years Early

		Current Plan		Full Actuarial Equivalent			Change	
		Table Factor		Actuarial Equivalent			Increase / (Decrease)	% Increase / (Decrease)
Early Retirement Factor		0.95		0.647				
	Pre 7/1/2010	N/A		N/A				
	Post 6/30/2010	N/A		N/A				
Early Retirement Benefit		2,564.70	120 mo guar	1,746.69	Single life		N/A	N/A
Form of Payment:	Factor	Member Benefit	Spouse Benefit	Factor	Member Benefit	Spouse Benefit	\$ Increase (Decrease)	% Increase (Decrease)
120 Months Guaranteed	1.000	2,564.70	N/A	0.943	1,647.53	N/A	(917.17)	36%
50% J&S	0.930	2,385.17	1,192.59	0.918	1,602.91	801.46	(782.26)	33%
75% J&S	1.000	2,564.70	1,923.53	0.901	1,573.09	1,179.82	(991.61)	39%
100% J&S	0.934	2,395.43	2,395.43	0.884	1,544.36	1,544.36	(851.07)	36%
Single Life Annuity	N/A	N/A	N/A	1.000	1,746.69	N/A	N/A	N/A

Benefit Example – Age 55 & 15 Pension Credits

Early Retirement and Form of Payment Subsidy

		Partic Age	Spouse Age
DOB	10/22/1955		
Last Day Wkd	8/23/2016	60.83	58.92
Annuity Start Date	11/1/2016	61.00	59.08
Spouse DOB	9/2/1957		
Accrued Benefit	Pre 7/1/1997	338.110	
	Post 6/30/1997	2,361.57	1,656.98 to 7/1/2010 704.59 after 7/1/2010
	Total	2,699.68	

Early Retirement Pension (Age 55 & 15 Pension Credits)

4 Years Early

		Current Plan		Full Actuarial Equivalent			Change	
		Table Factor			Actuarial Equivalent		Increase / (Decrease)	% Increase / (Decrease)
Early Retirement Factor		N/A			0.647			
	Pre 7/1/2010	0.920			N/A			
	Post 6/30/2010	0.760			N/A			
Early Retirement Benefit		2,370.97	120 mo guar		1,746.69	Single life	N/A	N/A
Form of Payment:	Factor	Member Benefit	Spouse Benefit	Factor	Member Benefit	Spouse Benefit	\$ Increase (Decrease)	% Increase (Decrease)
120 Months Guaranteed	1.000	2,370.97	N/A	0.943	1,647.53	N/A	(723.44)	31%
50% J&S	0.930	2,205.00	1,102.50	0.918	1,602.91	801.46	(602.09)	27%
75% J&S	1.000	2,370.97	1,778.23	0.901	1,573.09	1,179.82	(797.88)	34%
100% J&S	0.934	2,214.49	2,214.49	0.884	1,544.36	1,544.36	(670.13)	30%
Single Life Annuity	N/A	N/A	N/A	1.000	1,746.69	N/A	N/A	N/A

Endangered Status: Funding Improvement Plan (FIP)

■ Funding Improvement Plan

- Must be adopted by Trustees within 240 days after due date of certification of Endangered Status
- Trustees present the bargaining parties with one or more schedules of contribution increases and cuts in future benefit accruals, as needed to achieve the FIP goals
 - FIP Goal:
 - The Plan's underfunding improves by one-third by the end of the 10-year Funding Improvement Period
 - **Roughly 83% + (100% - 83%) / 3 = 89% by June 30, 2029**
 - Credit Balance may not be negative in the last year of the Funding Improvement Period
 - Excise taxes may be imposed if there is a negative credit balance during the Funding Improvement Period
 - Schedules include:
 - One schedule with reductions in the amount of future benefit accruals before contribution increases are required (Default Schedule)
 - One schedule with contribution increases without reduction in future benefit accruals
 - Alternative schedule with other benefit and contribution changes
 - Changes to future benefits requires 204(h) Notice 15 days prior to the effective date of the change

Endangered Status: Funding Improvement Plan

- **Funding Improvement Plan**

- Imposition of Default Schedule
 - For a contract in effect with the plan entered endangered status, Trustees can impose the Default Schedule if a FIP schedule is not adopted within 180 days of the expiration of the contract.
- Other Restrictions:
 - During the Funding 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 FIP 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.

Critical Status: Requirements

- **Benefit Restrictions**

- The Plan may not pay lump sums or other accelerated payment forms

- **Surcharges**

- Automatic Employer Contribution Surcharges are effective 30 days after Notice of Surcharges sent to bargaining parties
 - Surcharges equal 5% for the initial plan year of Critical Status, and 10% for the second and later plan years
 - Surcharges are NOT benefit bearing
 - Surcharges cease to apply upon adoption of RP schedule

Critical Status: Rehabilitation Plan (RP)

■ Rehabilitation Plan

- Must be adopted by Trustees within 240 days after due date of certification of Critical Status
- Trustees present the bargaining parties with one or more schedules of contribution increases and cuts in future benefit accruals, as needed to achieve the RP goals
 - RP Goals:
 - Benefit changes and contribution increases such that the Plan is expected to emerge from Critical Status by the end of the 10-year Rehabilitation Period
 - **Positive Credit Balance projected for current and 9 additional years**
 - Credit Balance may be negative during the Rehabilitation Period
 - Protection from excise tax as long as the Plan is making progress under the terms of the RP
 - Alternatively, declare “All Reasonable Measures”
 - Schedules include:
 - One schedule with reductions in the adjustable benefits before contribution increases are required. Future benefit accruals can be reduced to the lower of 1% of contributions or the current accrual rate (Default Schedule)
 - Alternative schedules with other benefit and contribution changes

Critical Status: Rehabilitation Plan

- **Rehabilitation Plan**

- Imposition of Default Schedule
 - For a contract in effect with the plan entered Critical Status, Trustees can impose the Default Schedule if a RP schedule is not adopted within 180 days of the expiration of the contract.
- Other Restrictions:
 - 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.

Critical and Endangered Status: RP and FIP

■ Annual Updates

- Each year, the Trustees must review (and may need to update) the Funding Improvement or Rehabilitation Plan
- Once the Funding Improvement or 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

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, 2016 actuarial valuation and assume no future liability gains or losses.**
- **PPA continues in its current form, as amended by MPRA**
- **Investment Returns**
 - 7.50% per year beginning 7/1/2017, net of investment-related expenses, unless otherwise noted
- **Level Covered Employment in All Future Years**
 - 243 active participants (1,900 hours or 47.5 weeks per active participant), unless otherwise noted
- **Operating Expenses**
 - \$375,000 for the plan year beginning July 1, 2016, increasing 3.0% per year
- **Contribution Rate Increases**
 - As required by current Collective Bargaining Agreements, unless otherwise noted:
 - 37% of hours worked under 3-year contracts beginning in 2017 (Paraco & LaFargeville)
 - 63% of hours worked under 3-year contracts beginning in 2016 (All Other Employers)
- **Plan changes**
 - None, unless otherwise noted

Other assumptions may be reasonable and could produce different results.

Data, Assumptions, Methods and Provisions

**Please refer to the Appendix of Horizon Actuarial Services
February 16, 2017 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.

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.

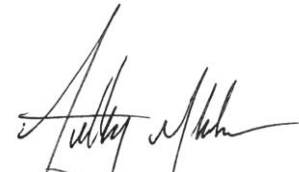
In our opinion, any methods, assumptions, and calculations are in accordance with the applicable provisions of the Internal Revenue Code and ERISA, and the procedures followed and presentation of results conform with generally accepted actuarial principles and practices. The undersigned consultants of 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



Anthony M. Ghabour, EA, MAAA
Consulting Actuary