Horizon
Actuarial Services, LLC

Industry & Local 338 Pension Plan

July 1, 2018 PPA Zone Certification & Actuarial Projections

September 13, 2018

Mary Ann Dunleavy, ASA
Stanley I. Goldfarb, FSA

Today's Discussion

- **Industry News**
- **Preliminary July 1, 2017 Valuation Review**
- **2018 PPA Zone Status Certification**
- **2018 – 2019 Timeline**
- **Appendix**
  - PPA Zone Certification Statuses
  - Rehabilitation Plan Summary
  - Summary of Assumptions and Methods
  - Summary of Plan Provisions

Industry News

Joint Select Committee Update

- **Joint Select Committee on Solvency of Multiemployer Pension Plans**
  - By November 30, 2018, the Committee is tasked with developing:
    - A report detailing its findings and recommendations
    - Proposed legislation to carry out its recommendations
  - The legislation also outlines procedures for an expedited vote in the Senate by January 3, 2019 (the last day of the current congressional term)
  - Agreement to move forward will require at least five Democrats and five Republicans. Any bill they propose will go before the relevant committees in the House and the Senate, where it cannot be amended. The bills will get expedited votes in the Senate.
  - The Committee has held 6 public hearings.
    - March 14, 2018: Open Executive Session to Organize the Joint Select Committee
    - April 18, 2018: The History and Structure of the Multiemployer Pension System
    - May 17, 2018: The Structure and Financial Outlook of the PBGC
    - June 13, 2018: Employer Perspectives on Multiemployer Pension Plans
    - July 13, 2018: Understanding What's at Stake for Current Workers and Retirees
    - July 25, 2018: How the Multiemployer Pension System Affects Stakeholders

Joint Select Committee Update

- **Consideration of measures that would affect <u>all plans</u>**

  1. **PBGC premium increases**
     - Could impact healthy plans, especially those with low contribution rates / benefit levels
     - Could hasten the decline of distressed plans

  2. **Mandated discount rates**
     - Would require 30 year Treasury rates or corporate bond rates currently required of single employer plans to determine required funding levels
     - This would result in <u>significantly increased</u> contribution requirements for <u>all plans</u>
     - Horizon Actuarial sent the Committee a detailed report to educate lawmakers of the devastating consequences of this proposal

  3. **Other changes to funding rules?**

- **Input from stakeholders (deadline: 9/30/2018)**
  - How will their proposals impact your Plan, Participants, and Employers?
  - We would be happy to work with you to draft letters to the Committee

Preliminary July 1, 2017 Valuation Review

Issues Impacting Current Valuation Results

- **Plan Changes**
  - None as of July 1, 2017 for valuation purposes
  - Benefit changes made by the Rehabilitation Plan are effective January 1, 2018, and will be reflected in subsequent valuations
- **Assumption Changes**
  - Each Active participant assumed to work 49 weeks per year (47.5 weeks per year for July 1, 2016 valuation)
- **Other Changes {NEW}**
  - Some minimum funding standard amortization charge bases have been combined, with the end result of accelerating the funding of the unfunded liabilities of the Plan
- **Funding Relief**
  - Trustees elected to apply Funding Relief to the Plan & 2008 net investment losses are
    - Phased into the actuarial value of assets over 10 years beginning with the July 1, 2009 determination
    - Eligible net investment losses are amortized over 29 years in the funding standard account (last base established in the July 1, 2014 actuarial valuation)

Minimum Required Contribution

Plan Year Ending	June 30, 2018 After Amtz Change	June 30, 2018 Before Amtz Change	June 30, 2017
A. Funding Standard Account			
1. Charges to Funding Standard Account			
a. Prior Year Funding Deficiency, if any	$ 0	$ 0	$ 0
b. Normal Cost	1,623,429	1,623,429	1,529,745
c. Amortization Charges	9,971,088	9,905,669	9,704,593
d. Interest on a., b., and c.	869,589	864,682	842,575
e. Total Charges	$ 12,464,106	$ 12,393,780	$ 12,076,913
2. Credits to Funding Standard Account			
a. Prior Year Credit Balance, if any	$ 19,273,336	$ 19,273,336	$ 22,202,890
b. Employer Contributions	TBD	TBD	3,448,566
c. Amortization Credits	3,631,860	3,631,860	3,631,865
d. Interest on a., b., and c.	TBD	TBD	2,066,928
e. Total Credits	TBD	TBD	$ 31,350,249
B. Minimum Required Contribution			
As of the Last Day of the Plan Year			
1. Before Reflecting Credit Balance	$ 8,559,856	$ 8,489,530	$ 8,172,658
2. After Reflecting Credit Balance	-	-	-
C. Amortization Bases for Form 5500 Schedule MB			
As of the First Day of the Plan Year			
1. Outstanding Balance of Amortization Charges	$ 57,970,256	$ 57,970,256	$ 60,869,020
Average Amortization Period - Charges	7.19	7.26	7.96
2. Outstanding Balance of Amortization Credits	18,366,590	18,366,590	20,717,070
Average Amortization Period - Credits	6.02	6.02	7.02

2018 PPA Zone Certification

2018 PPA Certification

- **Certification must be submitted by the 90th day of the Plan Year**
  - September 28, 2018
- **Preliminary Assets**
  - 7.79% return on assets for the plan year ending June 30, 2018
    - Based on information on investments provided by SEI and draft financial statements provided by Schultheis & Panettieri
- **Projected liabilities**
  - Based on results of the July 1, 2017 actuarial valuation
  - Plan changes known at the time of certification should be reflected
    - Changes made by the Rehabilitation Plan been reflected in the projections

2018 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
  - Contribution Rates
    - Only rate increases already included in CBAs as of the certification date are recognized

2018 PPA Certification: Industry Activity

Plan Year	Active Count	Average Hours Worked per Active	Average Ultimate Contribution Rate
7/1/2018 – 6/30/2019	*?*	*?*	*?*
7/1/2017 – 6/30/2018	241 (6 mo avg)	?	*?*
7/1/2016 – 6/30/2017	238	1,973	$ 6.24
7/1/2015 – 6/30/2016	243	1,901	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.

2018 PPA Certification (continued)

- **Projected Contributions, continued**
  - 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
    - Open Contracts
      - College of New Rochelle, Expired 8/31/2013
      - Westchester Local 860, Expired 9/30/2013
      - Montefiore New Rochelle, Expired 2/25/2017
      - Culinart, Expired 12/31/2016
      - Paraco Gas, Expired 1/31/2018
    - Upcoming contracts
      - Freisland, Expires 12/31/2018

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, 2017 actuarial valuation and assume no future liability gains or losses.**
- **PPA continues in its current form, as amended by MPRA**
- **Operating Expenses**
  - $375,000 for the plan year beginning July 1, 2017, increasing 3.0% per year
- **Benefit changes effective:**
  - Terminated Vested Participants: January 1, 2018
  - Active Participants: July 1, 2018 on average
- **No assumption changes to account for possible changes to participant behavior due to proposed benefit changes.**
- **Other assumptions could produce different results.**

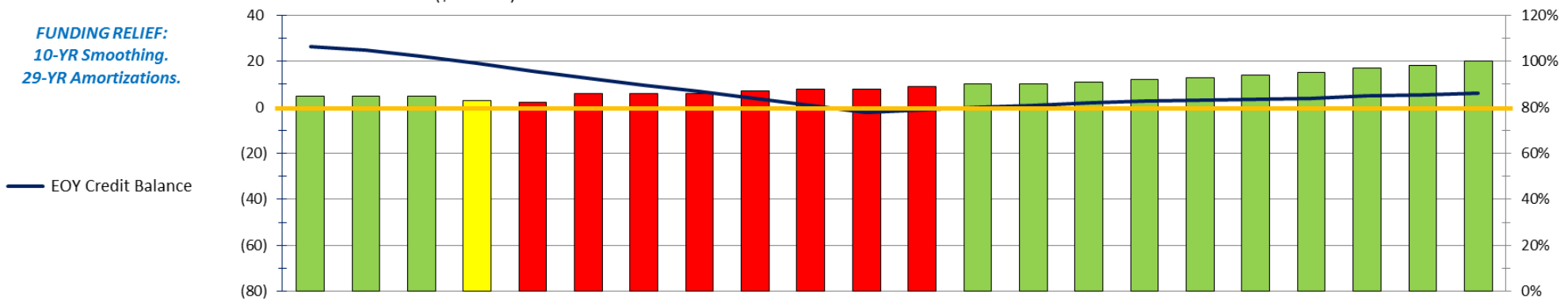
Preliminary 7/1/2018 Certification – Lower Work Levels

Eliminates All Adjustable Benefits | 7.79% Asset Return in PYB 2017 + 7.50% Return PYB 2018+ | 11.7 Thousand Weeks Worked in PYB 2017, 9.7 Thousand beginning PYB 2018+| Current CBA Contribution Increases[1]

Contribution Rate Increases in Current CBAs PLUS:
0.0% per year indefintely beginning PYB 2017 (68% of contracts)
0.0% per year indefintely beginning PYB 2019 (32% of contracts)

Industry and Local 338 Pension Plan
Funding Standard Account Credit Balance ($Million) = Left Axis
Funded Percentage = Right Axis

Combine and Offset Bases
7/1/2017



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
(1) Plan Year beginning 7/1																						
(2) Asset Return during Year (%)	15.86	3.10	(1.58)	13.13	7.79	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
(3) Weekly Contribution Rate	203	233	252	267	268	282	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285	285
(4) Weeks Worked (Thousands)	15.7	13.3	11.8	12.0	11.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
(5) Contributions in Plan Year ($M)	3.37	3.28	3.15	3.45	3.40	2.74	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76
(6) PYE Credit Balance ($M)	26	25	22	19	16	12	10	7	4	1	(2)	(1)	0	1	2	3	3	3	4	5	5	6
(7) Actuarial Value of Assets ($M)	87	91	94	93	93	93	92	91	92	92	92	92	91	90	89	88	87	86	84	82	80	78
(8) Unit Credit Accd. Liability ($M)	102	107	110	111	113	107	106	106	105	104	103	102	101	99	97	95	93	90	87	84	81	77
(9) PPA Funded Percentage at 7/1	85%	85%	85%	83%	82%	86%	86%	86%	87%	88%	88%	89%	90%	90%	91%	92%	93%	94%	95%	97%	98%	100%

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Notes

1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. Contribution rate changes made by the RP are reflected beginning in the July 1, 2017 plan year. 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.

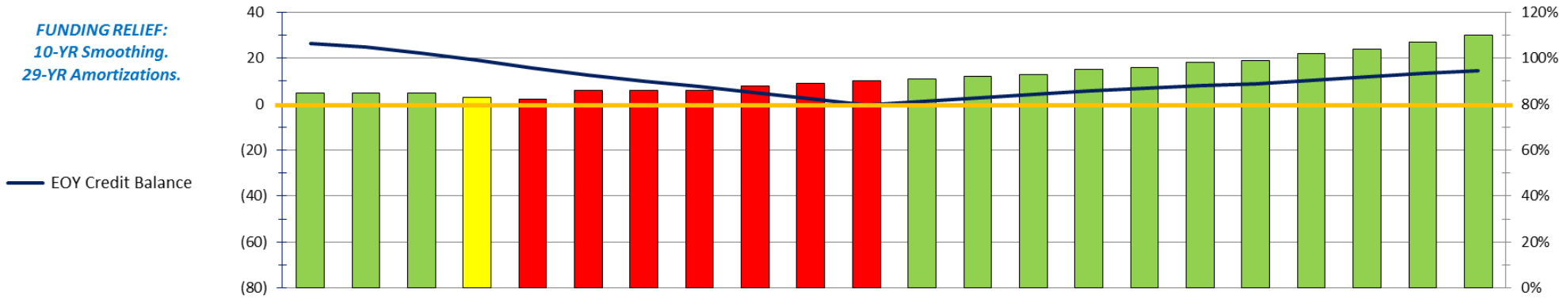
Preliminary 7/1/2018 Certification – Higher Work Levels

Eliminates All Adjustable Benefits | 7.79% Asset Return in PYB 2017 + 7.50% Return PYB 2018+ | 11.7 Thousand Weeks Worked in PYB 2017, 11.7 Thousand beginning PYB 2018+| Current CBA Contribution Increases[1]

Contribution Rate Increases in Current CBAs PLUS:
0.0% per year indefintely beginning PYB 2017 (74% of contracts)
0.0% per year indefintely beginning PYB 2019 (26% of contracts)

Industry and Local 338 Pension Plan
Funding Standard Account Credit Balance ($Million) = Left Axis
Funded Percentage = Right Axis

Combine and Offset Bases
7/1/2017



	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
(1) Plan Year beginning 7/1																						
(2) Asset Return during Year (%)	15.86	3.10	(1.58)	13.13	7.79	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
(3) Weekly Contribution Rate	203	233	252	267	258	270	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272	272
(4) Weeks Worked (Thousands)	15.7	13.3	11.8	12.0	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7	11.7
(5) Contributions in Plan Year ($M)	3.37	3.28	3.15	3.45	3.40	3.15	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18	3.18
(6) PYE Credit Balance ($M)	26	25	22	19	16	13	10	8	5	2	(0)	1	3	4	6	7	8	9	10	12	13	15
(7) Actuarial Value of Assets ($M)	87	91	94	93	93	93	92	92	94	94	95	95	95	95	95	94	94	94	93	92	91	90
(8) Unit Credit Accd. Liability ($M)	102	107	110	111	113	107	106	106	106	105	104	104	102	101	100	98	96	94	91	88	85	82
(9) PPA Funded Percentage at 7/1	85%	85%	85%	83%	82%	86%	86%	86%	88%	89%	90%	91%	92%	93%	95%	96%	98%	99%	102%	104%	107%	110%

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Notes

1) Effective July 1, 2016, all contributions (and future rate increases, if any) are benefit-bearing. Contribution rate changes made by the RP are reflected beginning in the July 1, 2017 plan year. 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.

2018 - 2019 Plan Year Timeline

PPA Timeline

Requirement	Description	Deadline
2018 PPA Certification	Certification 90 days into plan year; Critical Status	9/28/2017
2018 Notice of Critical Status	30 days after actuarial certification of zone status	10/28/2017
Imposition of Surcharges (Critical Status only)	First plan year = 5%; Second and succeeding plan years = 10%	11/1/2017 07/01/2018+
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	7/1/2020
Update of Rehabilitation Plan	Annually during the Rehabilitation Period	6/30/2021

2018 – 2019 Plan Year Timeline

Requirement	Description	Deadline
Annual Funding Notice	120 days after the end of the plan year	10/28/2018
Schedule MB (Form 5500)	Last day of the 7th month following the end of the Plan Year (2½ month extension available)	1/31/2018 (w/o ext) 4/15/2019 (with ext)
ERISA 104(d) Notice	30 days after due date Form 5500 filing	3/1/2019 (w/o ext) 5/15/2019 (with ext)
PBGC Premium Filing	15th day of the 10th full calendar month in the Plan Year	4/15/2019
Actuarial Valuation	Data requested	N/A
Review of Actuarial Assumptions	In conjunction with the actuarial valuation	N/A

Appendix

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)

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.

Rehabilitation Plan Design: Single, Default Schedule

- **Adopted September 18, 2017**
- **Benefit Changes**
  - 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
  - Effective date: January 1, 2018
- **Contribution Rate Increases of 6.5% per year (flat dollar equivalent)**

Rehabilitation Plan (cont.)

- **Rehabilitation Plan 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”
- **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

Rehabilitation Plan (cont.)

- **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
- **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.

Rehabilitation Plan (cont.)

- **Other 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.

Summary of Assumptions and Methods

Assumption or Method	Description of Assumption or Method
Interest Rate	7.50% per annum.
Plan Year	The twelve-month period beginning July 1 and ending June 30.
Mortality	Non-Disabled: Non-annuitant: 125% of the sex-distinct RP-2014 Blue Collar Employee Mortality Table Annuitant: 125% of the sex-distinct RP-2014 Blue Collar Annuitant Mortality Table Disabled: 125% of the sex-distinct RP-2014 Disabled Mortality Tables All mortality tables are adjusted to future years using generational projection under Scale MP-2014 to anticipate future mortality improvement.
Active Participant	Active participants are defined as those with at least two months of employment in the most recent plan year and who have accumulated at least one pension credit, excluding those who have retired as of the valuation date and those who work for an employer that has withdrawn from the Plan on or before the valuation date.
Exclusion of Inactive Vested Participants	Inactive participants over age 70 are excluded from the valuation.
Operating Expenses	Operating expenses were assumed to be $375,000 for the plan year beginning July 1, 2017 (equivalent to $360,672 payable at the beginning of the year).

Summary of Assumptions and Methods

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

Summary of Assumptions and Methods

Assumption or Method	Description of Assumption or Method
Weeks (Hours) Worked	Average of weeks worked in the preceding plan year. For the plan year beginning July 1, 2017, each active participant is assumed to work 49 weeks (1,960 hours) per year. For the plan year beginning July 1, 2016 the assumption was 47.5 weeks (1,900 hours) per active participant per year.
Future Benefit Accruals	One pension credit per plan year.
Contribution Income	For the purpose of projecting future contribution income, it is assumed contributions are earned based on the total number of hours worked for participants during the plan year preceding the valuation date. Participants are assumed to continue to work for the employer reported in the data and at the rate required by that employer's contract.
Asset Method	The market value of assets less unrecognized returns in each of the last five years. Unrecognized return is equal to the difference between the actual market return and the projected market return, and is recognized over a five-year period (10-year period for the plan year investment loss in the year ended June 30, 2009). The actuarial value is further adjusted, if necessary, to be within 20% of the market value.
Actuarial Cost Method	Unit Credit Cost Method.

Summary of Assumptions and Methods

Assumption or Method	Description of Assumption or Method
Form of payment *(as of July 1, 2017)*	Unmarried participants are assumed to elect a Life Annuity with a 120-month guarantee. Married participants are assumed to elect an unreduced 75% Joint and Survivor Annuity.
Marriage	75% of participants are assumed married.
Spouse Age	Wives are assumed to be three years younger than their husbands, if actual age is unknown.
Missing or Incomplete Participant Data	Assumed to be the same as those exhibited by participants with similar known characteristics. For those with unknown gender, gender was assumed to be male.
Unfunded Vested Benefits for Employer Withdrawals	Interest: • For liabilities up to the market value of assets, liabilities are valued using interest rates used by PBGC for plan terminations. For the July 1, 2017 valuation these are 2.15% and 2.60% (for 20 years and thereafter, respectively). Operating expenses as prescribed by PBGC formula (29CFR Part 4044, Appendix C) are included for liabilities determined using PBGC termination interest rates. • For liabilities in excess of the market value of assets, valued using 7.50% for all years. All other assumptions are the same as those used for the funding valuation.

Summary of Plan Provisions (as of July 1, 2017)

Plan Provision	Description of Plan Provision
Plan Year	The twelve-month period beginning July 1 and ending June 30.
Participants	An Employee becomes a participant in the Plan on January 1 or July 1 after completing four months of covered employment in any consecutive 12-month period.
Normal Form of Payment	For unmarried participants, a Life Annuity with a 120-month certain period. For married participants, a 75% Joint and Survivor Annuity.
Cost of Living Increases	None.
Benefit Service	¼ Pension Credit for each two months of covered employment, with a maximum of one pension credit after eight months. The maximum total pension credits for benefit purposes is 35.
Vesting Service	One year of vesting service for four months of covered employment.
Break-in-Service	A break in service occurs in any plan year in which the participant fails to complete at least two months of work. In determining whether a break in service has been incurred, work in non-covered employment that is credited as vesting service will be considered covered employment.

Summary of Plan Provisions (as of July 1, 2017)

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

Summary of Plan Provisions (as of July 1, 2017)

Plan Provision	Description of Plan Provision
Contribution Rates	For the period beginning September 28, 2006 and ending June 30, 2016, in the event a contributing employer is obligated to make a special Supplemental Contribution to the Fund solely for the purpose of improving the funding status of the Plan, such Supplemental Contributions shall not be included in the calculation of a Participant's pension benefit. Effective July 1, 2016, all contributions are benefit-bearing under the newly adopted benefit formula (0.9% x Total Contributions). For the plan year ended June 30, 2017, total contribution rates range from $174.00 to $286.43 per week.
Service Pension	<u>Eligibility:</u> 20, 25, 30 or 35 pension credits <u>Amount of Benefit:</u> 20 Year Service Pension = 50% of the Regular Pension 25 Year Service Pension = 90% of the Regular Pension 30 Year Service Pension = 95% of the Regular Pension 35 Year Service Pension = 100% of the Regular Pension

Summary of Plan Provisions (as of July 1, 2017)

Plan Provision	Description of Plan Provision
Early Pension	Eligibility: An Employee is eligible for an Early Pension if the Employee has attained age 55 and has earned 15 pension credits. Amount of Benefit: Upon the Early Retirement Date, a Participant will be entitled to receive a monthly benefit equal to his Normal Retirement Benefit earned reduced by: 2% for each year of age less than 65 to age 55 for benefits accrued before July 1, 2010. 6% for each year of age less than 65 to age 55 for benefits accrued on or after July 1, 2010.
Disability Pension	Eligibility: An Employee is eligible for a Disability Pension if total and permanent disability prevents engagement in regular employment, and the Employee has earned at least 10 Pension Credits. Amount of Benefit: If the participant retires on a Disability Pension on or after July 1, 1997, the Disability Pension is the greater of (a) $400, or (b) the actuarial equivalent of the accrued benefit earned as of the last date worked. If the participant retires on a Disability Pension before July 1, 1997, the Disability Pension is determined under the Plan rules in effect at that time.

Summary of Plan Provisions (as of July 1, 2017)

Plan Provision	Description of Plan Provision
Death Benefits	Married: If a participant is married and dies after earning the right to a Statutory Pension (5 years of service), the spouse will be entitled to a survivor benefit, as long as they were married for at least one year at the time of death. The spouse's monthly benefit is 75% of the benefit earned as of the day before death, subject to any reduction that would have applied for payments before 65. If the participant had not yet reached age 55, the benefit will be calculated as if they had reached age 55 and applied for an Early Retirement Pension immediately before death. If the participant had at least 20 Pension Credits, the spouse's benefit will be based on the greater of a Service Pension or an Early Retirement Pension. If the participant had fewer than 15 Pension Credits, the spouse's benefit will be calculated according to the Early Retirement Pension reduction factors. Unmarried: A 120-Month Certain Benefit is paid to the beneficiary of an unmarried participant who dies in active service after qualifying for a Statutory Pension (5 years of service). The beneficiary will receive the monthly amount the participant would have received had they retired on the date of death for a total of 120 months. If the participant has not yet reached age 55, then the benefit will be calculated as if he had reached age 55 and applied for an Early Retirement Pension immediately before death.
Special Death Benefit	If the lump sum value of a survivor benefit is less than $10,000, payment will automatically be made in one lump sum.

Actuarial Certification

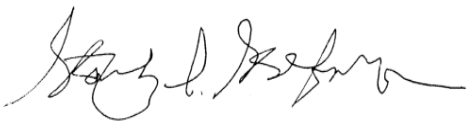
We have prepared this actuarial report for use by **Industry & Local 338 Pension Plan** (the "Plan"). This report has been prepared solely for the benefit of the Plan, and it is not complete without the accompanying discussion with a representative of Horizon Actuarial Services, LLC. This report should 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.

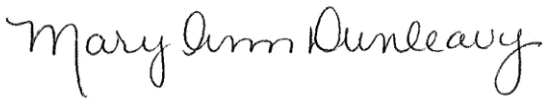
The analysis contained in this report involves actuarial calculations. Actuarial calculations require that we make assumptions about future events. We have used assumptions that we believe are reasonable and appropriate for the purpose for which they have been used. Other assumptions may also be reasonable 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 the 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, all 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



MaryAnn Dunleavy, ASA, EA, MAAA
Consulting Actuary

Contact Us

If you have any questions regarding the analysis presented in this report, please contact one of the consultants whose contact information is provided below.

Horizon Actuarial Services, LLC

Stanley I. Goldfarb, FSA
Actuary and Managing Consultant

8601 Georgia Avenue ■ Suite 700 ■ Silver Spring, MD 20910
Phone/fax: 240.247.4512 ■ mobile: 202.486.8407
stan.goldfarb@horizonactuarial.com www.horizonactuarial.com

Horizon Actuarial Services, LLC

MaryAnn Dunleavy, EA
Consulting Actuary

8601 Georgia Avenue ■ Suite 700 ■ Silver Spring, MD 20910
Phone/fax: 240.247.4524 ■ mobile: 240.351.1414
maryann.dunleavy@horizonactuarial.com www.horizonactuarial.com